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THIRD SERIES VOL 55 NUMBER 3 JANUARY 1948

THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

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Repairing Nash's Terraces. Specially drawn for the JOURNAL *by Norah Glover* [*A*]

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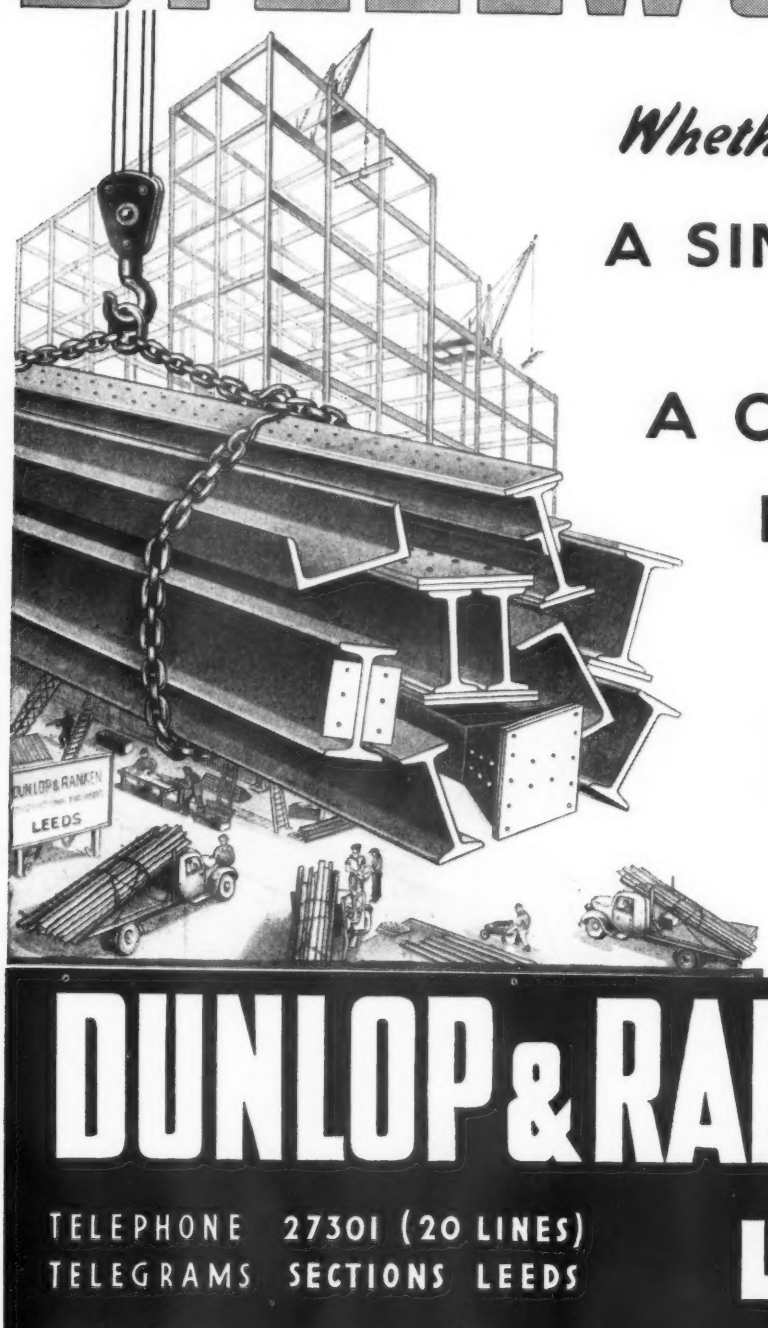

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H.R.H. Princess Elizabeth elected an Honorary Fellow

Her Royal Highness the Princess Elizabeth has graciously accepted the invitation of the R.I.B.A. Council to become an Honorary Fellow of the Royal Institute, and was formally elected at the meeting of the Council held on 9 December.

New Year's Honours

Sir Thomas Sheepshanks, K.B.E., has been created a Knight Commander of the Bath in the New Year's Honours List; he is Permanent Secretary, Ministry of Town and Country Planning. Mr. George L. Pepler [*Hon. A*] and Mr. John W. Stephenson, General Secretary, Plumbers', Glaziers' and Domestic Engineers' Union, have been made Knights Bachelor.

In addition to the above, congratulations are extended for the distinctions conferred upon the following members and good friends of the R.I.B.A.:

G.B.E. Sir Edward Mellanby, K.C.B., F.R.S., Secretary, Medical Research Council.

C.B.E. (*Civil*). Mr. E. Graham Clark, M.C., Secretary, Institution of Civil Engineers; Mr. W. H. Forsdike, Past President, N.F.B.T.E.; Mr. Charles Wheeler, R.A., President, Royal Society of British Sculptors; Mr. F. Lambert, F.S.A., Director, The Walker Art Gallery; and Mr. P. H. Jowett, R.W.S., A.R.C.A., Principal, Royal College of Art.

O.B.E. (*Civil*). Mr. J. A. Cope-Christie [*F*] (Rhodesia), Mr. J. Greaves [*F*], Major C. W. Reeves [*F*], Mr. Basil Spence [*F*], and Mr. J. M. Theobald, Past President, Royal Institution of Chartered Surveyors.

M.B.E. Mr. B. F. Brueton [*A*] and Mr. H. Waddington (Student).

Exhibition of Soviet Architecture at the R.I.B.A.

An exhibition of the Architecture of the U.S.S.R. is to be shown at the R.I.B.A. from 3 March to 20 March inclusive. It will be in two parts, the first showing the history and development of Moscow from the year 1100 to the present day, the second showing the regional architecture of the Soviet republics. It has been brought to this country by the Society for Cultural Relations with the U.S.S.R. Further details will be announced in the February JOURNAL.

Mr. Edward Maufe, R.A.

Members will join us in congratulating Mr. Edward Maufe [*F*] on his election as a Royal Academician.

The Control of Engagement Order and R.I.B.A. Students and Probationers

When the Control of Engagement Order 1947 came into operation last October the Institute had some doubt as to whether Students and Probationers, R.I.B.A., who had entered upon a recognized course of architectural study came within its scope.

A case was put before the Ministry of Labour and National Service, and their advice sought. The Ministry have now informed the R.I.B.A. that Students and Probationers who seek employment through the Institute's Appointments Department are affected by the Order, unless the employment does not exceed 30 hours per week.

Nevertheless, the Ministry do not consider the activities of the Appointments Department to constitute an infringement of the Order, provided that Student and Probationer registrants obtain the approval of the Local Office of the Ministry nearest to the place of employment before accepting a post which has been brought to their notice by the Department.

Members, Students and Probationers availing themselves of the services of the R.I.B.A. Appointments Department are particularly asked to note this provision, and it becomes more necessary than ever to notify the Institute when they have filled a vacancy or obtained a post through the medium of the Department.

R.I.B.A. Conference and Exhibition on Housing Layout

A conference and an exhibition on 'Housing Layout in Theory and Practice' are to be held at the R.I.B.A. in the Summer. They will be similar in scale and purpose to the Schools conference and exhibition held last year. The dates and programme of the conference are not yet fixed but the Exhibition Sub-Committee is starting to collect material for the exhibition. Members who have material suitable for the exhibition are asked to submit it as soon as possible; full particulars are given on page 130 of this JOURNAL. As regards the conference, members are specially asked not to apply for further details or tickets until full particulars are announced.

Mr. George Drysdale

Mr. George Drysdale [*F*], who recently retired from the post of Principal of the Birmingham School of Architecture, has asked us to say that he has been unable to thank individually all past and present students of the School for their very handsome present, there having been so many subscriptions that some names may have been inadvertently overlooked. He hopes that those donors will accept this method of acknowledging their generosity.

Wedding Present to H.R.H. the Princess Elizabeth

The President has received the following letter from Her Royal Highness the Princess Elizabeth:

Birkhall, Ballater.
9 *December* 1947

Dear Sir Lancelot,

I am so pleased with the Chippendale Chest of Drawers which the Royal Institute of British Architects have so kindly given me as a Wedding Present. It is, I can assure you, something which I much admire and which will be of the greatest practical value to me. Would you please let all concerned know how grateful we both are for their present and how delighted by this mark of their affection and goodwill.

Yours sincerely,
(Signed) ELIZABETH.

Building Research Advisory Council

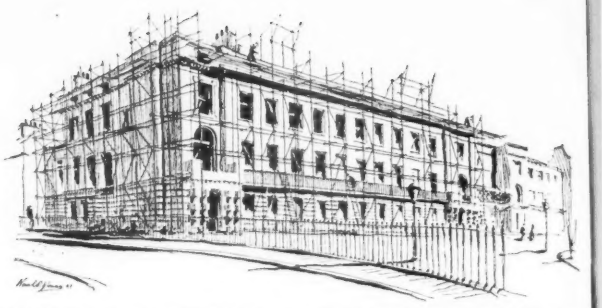
The Minister of Works has set up an Advisory Council on Building and Civil Engineering Research and Development. In answer to a question in the House of Commons on 8 December the Minister said: 'The Government has recently had under consideration the arrangements for building research, and has now decided that my Department should bear the main responsibility for reviewing the whole field of building research, identifying gaps and problems requiring further research, determining their relative priorities, and bringing them to the notice of the appropriate research organization. My Department will also continue to keep the technical development of the building industry under review, to promote the final stages of technical development, and to encourage within the industry the use of the results of research and of technical development generally. The Department of Scientific and Industrial Research will continue to be responsible for carrying out scientific research within its field, including initial development in building, and to be free to initiate research. It will also be free to undertake investigations at the direct proposal of industry. The Ministry of Works will, for the time being, retain the primary responsibility for sociological and economic research in the building industry. Close contact will be maintained between the two Departments.

'To advise in the carrying out of these responsibilities, I have appointed an Advisory Council on Building and Civil Engineering Research and Development, including persons engaged in the building and civil engineering industries, in the professions and in scientific work, together with assessors appointed by the Government Departments concerned. The Council will take the place of the Scientific Advisory Committee of the Ministry of Works, and I would like to express my appreciation of the work that the Committee has done in the two years of its existence.

'The terms of reference of the Council are: (1) To keep under review the whole field of building research and technical development and the results obtained therefrom. (2) To suggest from time to time subjects of further research and development with due regard to their relative importance and urgency. (3) To advise on the programme of sociological and economic research in the building industry, and other research and development work for which the Ministry of Works is responsible. (4) To advise on the methods of securing the use by industry of the results of research and technical development.

'The membership is: Chairman, Sir Harold Emmerson, K.C.B. (Permanent Secretary, Ministry of Works); Vice-Chairman, Sir George Gater, K.C.B., K.C.M.G., D.S.O. (Chairman of the Building Apprenticeship and Training Council); Members: Professor J. D. Bernal, F.R.S., Professor H. V. A. Briscoe, Mr. D. N. Chester, Mr. H. E. Comben, Mr. R. Coppock, C.B.E., Mr. C. T. Every, C.B.E., Mr. L. Fawcett, O.B.E., Captain A. H. Holbein, Mr. T. C. Howitt, D.S.O. [*F*], Sir Lancelot Keay, K.B.E., P.R.I.B.A., Mr. A. Lamond, C.B.E., Professor C. A. Mace, Professor J. M. Mackintosh, Dr. L. J. Murdock, Mr. W. T. Porteous, Mr. B. Sandercock, O.B.E., Mr. E. J. Smith, Professor W. N. Thomas, C.B.E. [*F*], Mr. Guthlac Wilson, Dr. F. Yates, Professor S. Zuckerman, C.B., F.R.S. Assessors from: Ministry of Education, Ministry of Fuel and Power, Ministry of Health, Department of Health for Scotland, Department of Scientific and Industrial Research, Ministry of Works.

'Members of the Council serve in their personal capacities and do not represent the organizations of which they are members.'



Nash's terraces under scaffolding. A companion drawing to this month's cover picture by Norah Glover [*A*]

The Influence of Research on Design

A sessional paper which is likely to attract a large audience is that by Mr. M. Hartland Thomas, M.A., M.S.I.A. [*F*], on 24 February. He will speak on 'The Influence of Technical Research on Design and Methods of Building.' He is specially qualified for his task in being Chairman of the Architectural Science Board and Hon. Secretary of the M.A.R.S. Group. In 1945 he led a party of technicians in Germany to study German building methods on behalf of the Ministry of Works. He has just resigned his post as Deputy Chief Architect to United Dairies Ltd. and joined the Council of Industrial Design to take charge of its Industrial Section.

The A.B.S.

At the time of going to press the A.B.S. Half-Crowns Christmas Fund has achieved a total of £697. There is still time for more contributions before it closes.

Mr. Hugh Montgomery has sent the A.B.S. a cheque for £300 in respect of the special admission cards for the Building Exhibition. The A.B.S. ask us to express their very grateful thanks to all those architects, exhibitors and other friends who so kindly gave prizes and thus ensured the success of the Tombola.

R.I.B.A. Diary

TUESDAY 27 JANUARY 6 P.M. General Meeting. *Recent Planning Developments in the Colonies.* Sir Frank Stockdale, G.C.M.G., C.B.E. (Adviser on Development Planning, Colonial Office), and detailed description of West Indian schemes by R. J. Gardner-Medwin, B.Arch., A.M.T.P.I. [*A*].

TUESDAY 3 FEBRUARY 6 P.M. A.S.B. Lecture. *Effect of Services on Planning and Design.* H. G. Goddard, D.S.O., D.F.C., A.F.C., M.A. [*F*].

TUESDAY 10 FEBRUARY 6 P.M. General Meeting. Presentation of Medals and Prizes, and Address to Students by Professor Lionel B. Budden, M.A. (Livpl.), [*F*].

TUESDAY 24 FEBRUARY 6 P.M. General Meeting. *The Influence of Technical Research on Design and Methods of Building.* M. Hartland Thomas, M.A. [*F*].

TUESDAY 9 MARCH 6 P.M. General Meeting. *The American Scene.* Howard Robertson, M.C., S.A.D.G. [*F*].

The Architect's Responsibility for Industrial Design

By John Gloag [*Hon. A*]

Read before the Royal Institute of British Architects, 9 December 1947

The President in the Chair

INDUSTRIAL DESIGN is a term which has come into common use during the last 25 years, and it denotes primarily the design of goods which are produced in quantity by means of modern industrial technique. The quantity may vary considerably; so may the scale of the products; for the technique of industrial production is used in the making of things as different as safety-razors, lawnmowers, cooking stoves, railway rolling stock, radio receiving sets, motor-cars, and houses constructed from factory-made units. The quality of industrial products varies too; such variation depending partly upon the properties of the materials used, but chiefly upon the character of their design. And in examining the character of industrial design, we are confronted by the most consistently visible weakness of contemporary civilization, because the character of design in the mid-20th century depends upon chance.

In the phase of industrial development which preceded the commercial machine age in which we are now living, the character of design depended not upon chance, but upon the trained imagination of the architect, who was the master designer, conscious of his responsibility for the design not only of buildings and everything that was used to equip and furnish them, but for the innumerable components of civic and rural environment. The architect was actively aware of this universal responsibility for design, and was equipped comprehensively by training and inclination to accept it; moreover his clients and the public and the skilled men who gave material substance to his work recognized him without question as the master designer. The result was that for a period which lasted for nearly a century and a half—from the end of the Commonwealth until the reign of William IV—we enjoyed a Golden Age of design. Select what you will from the middle years of that period, and whether it is a watch case, a coach, a door knocker, a cream jug, the simple furniture of a cottage, the elegant furniture of a gentleman's town house, a brace of duelling pistols, a decanter, a wine glass, or a chandelier, it will bear the impress of trained imagination working through a universal system of design; and the master practitioner of that universal system of design, whose judgement and knowledge permeated and inspired every branch of industry, was the architect.

It seemed so obvious and easy in the 18th century for the architect to assume responsibility for directing and inspiring design, and for disseminating knowledge of what Gibbon called 'a few general and even mechanical rules' which governed the practice of architecture and ultimately the form and finish of nearly every artifact. The system of design, which Inigo Jones had first interpreted and rendered comprehensible to English architects and craftsmen, ultimately dominated the visible surroundings of people in all walks of life. As that system was translated by superbly competent craftsmen and mechanics, we enjoyed during the Golden Age of design, something akin to the visual serenity attained in the Greek cities of the 5th, 4th and 3rd centuries, before Christ, when science, subdued to the service of art, gave to the sense of sight a new and profound significance.

The system of design, which arose from the educative potency of the classic orders of architecture and the rules which determined their proportions, had originated in Greek civilization; but that system was not the only factor in establishing the architect as the supremely responsible designer in 18th-century England. Architecture is the Mistress Art; and Building is the Master Industry. Building commands the services of almost all the crafts and materials which have been practised and used in every civilization of which records survive. The training of the architect has always brought him into familiar contact with many industries and a multiplicity of materials; building was his business, and building was the master industry, or, as we should call it with less confident emphasis today, the 'key' industry; so it was inescapably obvious and indeed easy for the architect to become the responsible master designer whose work and imagination led the country's industries. It is true that those industries were established upon a craft basis; their productive capacity depended upon the skill of many hands; but the transition from organized handicrafts to mechanized production, which took place during the first industrial revolution, did not automatically exclude the architect as the master designer. New materials were introduced and new methods of using old materials were invented; but the first industrial revolution, which was founded upon coal and iron and steam, did not become established quickly enough for people to grasp what was happening; even the makers of that revolution, the great iron-masters and mill owners, were unaware of the fact that they were revolutionaries; there was no abrupt or deliberate break with the tradition of looking to the architect for direction. Design was not yet dependent upon chance.

Architects were occasionally called in to collaborate with the leaders of the new and growing industries, not only over such large scale individual problems as the design of the first cast iron bridge, which was erected in 1779 over the River Severn, but in connection with the industrial production of such commodities as stoves and grates, and various cast, moulded and stamped metal units used in building and furnishing. In Scotland, for example, John Adam, one of the four famous brothers, became a partner in the Carron Company in 1764; and his talented younger brothers, Robert and James, enormously influenced the design of the firm's output of goods, and actually directed a proportion of that output. Many records of their prototype designs still survive.

The opportunity for collaboration certainly existed; but it was recognized in a fitful, transient manner, and it was missed altogether within 50 years of the first conspicuous example of it, when Thomas Farnolls Pritchard, a Shrewsbury architect, and John Wilkinson, the great ironfounder, had persuaded the company which had been formed to replace the ferry over the Severn with a bridge to use cast iron for its construction. The responsibility for directing industrial design was temporarily assumed by the great engineers of the late 18th and early 19th centuries. It is significant that such men as Thomas Telford, John Rennie, and the Stephensons, father and son, while employing the new materials and techniques of the first industrial revolution also used the great system of design which had hitherto guided the versatile accomplishments of architects and the work of those who practised, under architectural direction and inspiration, the craft-based industries of the country. This inclination to respect and continue the technique of design which architects had perfected, long survived the abandonment by the architectural profession of its sense of universal responsibility for design. That noble sense of responsibility was one of the casualties of the so-called Battle of the Styles—the unreal and variously ridiculous conflict which enervated the authority of the architect, and deposed him from the position of master designer. Thereafter his activities were narrowed; he lost command over the character of civic and rural environment, and never exercised the power he might have had over the products of industry and the surround-

ings of those engaged in industrial production.

As a country we have suffered incalculable loss through the architect's abdication of universal responsibility for design, and one grim result of that abdication was the devastation of huge tracts of our countryside by the casual savagery of the early industrialists; another is the ugly fact that now, in the mid-20th century, the character of industrial design depends largely upon chance. Since the beginning of this century the architect has, by a lively and increasing interest in town-planning, recovered some of his lost authority as a master designer and has consequently resumed some command over our present and future surroundings; but whether he will be allowed fully to exercise his trained imagination during the second half of the century, depends upon the respect he is accorded as a responsible technician. His trained imagination may be circumscribed by the official needs of some state-sponsored ideology. He may be deprived of all opportunities for expressing an exuberant inventiveness if he works in the shadow cast by a monstrous bureaucracy, in the committee-ridden atmosphere of a collectivist or a totalitarian state, for we have yet to learn whether the political genius of our country will prove to the rest of the world that those terms, collectivist and totalitarian, are not synonymous. It is only by resuming his former large responsibility for design that the architect could regain through the influence of his work the urbane coherence which distinguished their everyday surroundings five generations ago.

The architect missed his chance of civilizing the achievements of the first industrial revolution; but there is still time for him to raise and control standards of design in the second industrial revolution, which we are now experiencing. It was mentioned earlier how the first derived its power and momentum from coal, iron and steam; the second is based upon the use of light alloys, chemically produced synthetic materials, and cheap, abundant electric power. The cheapness and abundance of that power may be so vastly increased if and when atomic energy is used for the generation of electricity, that the whole character of industry and civilization may be changed beyond recognition.

How good or bad those changes may be depends largely upon the architectural profession, for that profession is the only one which inculcates in its practitioners that broad sense of social and economic awareness which makes them consider the impact of their work upon the whole structure of society—upon the amenities both of the city and the countryside, and the lives and welfare of people everywhere. No other profession, not even the great medical profession, has so much potential power for good as the architectural profession; and the second industrial revolution may well become a glorious achievement whereby prosperity and civilized amenities are simultaneously attained, if only the architect recognizes both his opportunities and responsibilities for industrial design.

Architecture is still the mistress art; building is still the master industry. Nearly every form of power and every kind of material are used in the technique of contemporary building. Because of his training and his day-to-day work, the architect is brought into contact with the practical manifestations of contemporary industrial technique as it affects building. As a technician, he is therefore well equipped by education and experience fully to understand the innumerable aspects and intricacies of industrial production.

At the beginning of this paper it was stated that the term 'industrial design' denoted the design of goods which were produced in quantity by means of modern industrial technique. That statement requires amplification; and some broad subdivisions of the term are desirable. Industrial design may be described and examined under three sub-divisions, two of which are of major concern to the architect, as they are associated with the shape, form, texture, colour, materials and production technique of goods which are made in factories. Here then are three headings under which the whole subject may be clarified: *General Industrial Design; Decorative Industrial Design* and *Commercial Design*. These are arbitrary but convenient labels for the three main aspects of the subject, and their scope is easily described.

1. **General Industrial Design.** This covers goods produced in a factory, or objects which are produced as a result of assembling factory-made units. Into this section would come articles as varied in character as domestic equipment, typewriters, bicycles, street furniture, such as lamp standards and passenger shelters, gramophones, motor omnibuses and office furniture. That is only a brief list; but all those things are products of industrial technique.

2. **Decorative Industrial Design.** Under this heading may be grouped the products of industries which are still run on a craft basis, or are concerned with products that depend chiefly upon texture, pattern and colour, such as textiles of all kinds, and wallpaper. Industrial products with a craft basis include many forms of pottery and domestic glass, a few sections of the iron-founding industry and certain branches of the furniture industry.

Both these sub-divisions overlap, and both occasionally affect the next division.

3. **Commercial Design.** This third heading is not concerned with the products of industry, but with design in relation to distribution. Generally speaking, this division covers the activities of those who sell and display goods or services. It includes, for example, such temporary forms of architecture as exhibition stand design. Apart from exhibition work, it is the division which is of least concern to architects.

The use of these sub-divisions does not over-simplify the subject; it helps to avoid the confusion which so often obscures discussion and hampers objective thinking about a vital but ill-defined activity.

It is the first sub-division, *General Industrial Design*, which today is, or should be, the main concern of the architect; for this represents a basic activity closely related to that for which the architect is primarily trained. Personal aptitude and inclination may determine whether an architect gives any part of his time to the second division, and, for occasional recreation, designs decorative patterns. It is to general industrial design that he should be and often is chiefly attracted. This is emphasized by the significant fact that many of the ablest industrial designers in this country are either fully qualified architects, or have had the advantage of an architectural training. Such men have, individually, recognized the larger responsibility which the architect should today assume; but this statement must be qualified. No architect should assume responsibility for industrial design unless he has the inclination and capacity to make his work in that enormously varied field, effective, practical, and most important of all, realistic. To be realistic an industrial designer should not practise industrial design as a form of philosophical uplift, or in the arrogant missionary spirit which emanates from the belief that all industrialists are coarse, ignorant obstructionists, panting for profits and averse to all progress. His realism must be based on a down-to-earth common-sense understanding that goods which are produced in a factory have to be sold, and that the industrialist, who is the designer's client, has to make a profit to keep his business in existence, and that it is only from profits that experiments in development and experiments in design can be financed.

An architectural training is a desirable and excellent preliminary for the study and practise of industrial design; though there are many capable and outstanding industrial designers, who have not had an architectural training; and it would surprise many architects to learn what a great deal those independent industrial designers know about architectural design. The two subjects, industrial and architectural design, are now very closely related. The production of houses, in a factory, brings that particular branch of domestic architecture under the heading of industrial design: although this is hotly contested by architects who belong to what may one day be called the segregation school of thought. The segregation school desires to keep architecture in an 'idea-tight compartment', to borrow a phrase from Professor J. B. S. Haldane, and by implication its exponents deny that large responsibility for all design, architectural and industrial, which the architect should once more resume. Until he resumes that responsibility, the character of industrial design will continue to depend upon chance—the chance that a firm may have a development director who is well educated, that is to say that he can use the sense of sight for more than reading, writing and understanding a balance sheet. Only in firms where there is some such strong influence for progress, is the industrial designer given an opportunity of taking his place with the other technicians

concerned with industrial production, so that the basic operation of design is properly honoured, and the designer is brought in when the whole production programme is in the initial stage of planning.

The chief problem of the progressive industrialist who wants to work with designers is how to find the right designer. Very often, his good fortune or his good sense has led him to give a young architect an opportunity to make experiments. Here, in the headquarters of the architectural profession, it would perhaps be invidious to cite specific instances of such fruitful and far-reaching collaborations between industrialists and architects; but today the industrialist is in a far better position to solve this problem than he was ten years ago.

He is beginning to realize that industrial design is a professional activity and that the men and women who practise it are recognized technicians. Industrial designers both in this country and the United States have formed societies, which scrutinize the qualifications and watch the interests of those who practise industrial design. In Britain there is the Society of Industrial Artists, a progressive and ably organized professional body. In the United States the Society of Industrial Designers is a well-established and authoritative body. (In America, with commendable wisdom, the word 'designers' is used instead of that loose and doubtful word 'artists.') Then there is a state-sponsored body called the Council of Industrial Design, which has been established in order to improve the relations between designers and industry, and to facilitate and extend education in design; at least that is what one assumes, though the Council of Industrial Design has hitherto been unable clearly to state in simple and easily comprehensible terms exactly what it is supposed to do, how or why. Its new director, Gordon Russell, one of the most distinguished designers in Britain, America and Europe is now assisted on the industrial side by a well-known architect, Mark Hartland Thomas, whose recent appointment gives official recognition to the responsibility of the architect for industrial design.

Now if this Council is to prosecute the job of educating industry and impressing industrialists with the fact that good design can pay, it should devote its energy and our money—for we are all financing it—to one main job and to that only. It should collect from all over the world specific examples of the beneficial effect of good design upon the sale of goods. It should collect facts, figures, progress charts, and case histories, from North and South America, from the British Dominions, from Europe, and from our own country, and publish them, or make them available, so that manufacturers can be shown in the only way which many of them are able to understand, that good design can be good business.

Swift said, 'Vision is the art of seeing things invisible.' It is an art which is not readily mastered by industrialists in any country; and it is a capital mistake to assume the conversion of any industrialist to good design because a designer or an official from the Council of Industrial Design suggests that, like Guinness, it is good for him. He can appreciate that Guinness is good for him; he understands Guinness, but he does not understand design. Its practical meaning for his business has to be convincingly demonstrated.

This is where the Council of Industrial Design could come into the picture and stay in. By collecting and publishing hundreds of case histories it could enable the industrialist to realize that design was as good for his business as Guinness was for him, as a man. Moreover, the Council of Industrial Design would thus arm the industrial designer with indisputable proofs of the practical validity of his profession.

This introduces a matter of some delicacy; one which perhaps nobody should mention in the G.H.Q. of the architectural profession. An architect is a professional man; he is a technician; he has codes of practice, and a nice sense of professional honour which precludes him from the crude and even coarse task of getting business for himself. He cannot advertise his services; he cannot, at any social gathering, or any other sort of gathering, pick out a likely looking client and say: 'What you want is a new house'. And this puts any architect who is practising industrial design, or who wants to practise it, at a considerable disadvantage; for practising industrial designers who are not qualified architects, and who are not members of this Institute, have no such restrictions placed upon their business-getting activities. They can go out and get business; they can advertise their services, and they can step in where architects professionally must not tread. This is a difficulty which must be acknowledged and overcome if the architectural profession takes industrial design under its wing. One possible solution lies in partnerships between architects and other industrial designers, who do not happen to be qualified architects. There are several such enlightened partnerships in existence already in this country and many in the United States.

There is another delicate question. What will be the position of the Society of Industrial Artists *vis-a-vis* the Royal Institute of British Architects? That Society has its standards of practice and membership qualifications, and the architect who practises industrial design is often elected as a Member, an Associate or a Fellow of the Society of Industrial Artists. In the work of that Society and this Institute, many opportunities for collaboration must inevitably occur in the future. If the architect becomes increasingly interested in industrial design, then the functions of these two bodies—the one long-established, wise, mature, authoritative, and enjoying the lustre of a Royal Charter, the other young, still feeling its way, though vigorous and progressive—will become complementary and often overlap. In the field of education the most effective collaboration between the two bodies might come about. And although the suggestion may well be regarded by both bodies as gratuitous impertinence, coming from somebody who is neither an architect nor a designer, an immediate association of their interests seems desirable in the field of education.

This view is strongly supported by the statement made by Mr. Robert Furneaux Jordan, at the opening of the Architectural Association Session for 1947-48, when he commented upon the address given by that Association's President, Mr. Howard Robertson. Mr. Jordan said that considerable numbers of architects were being trained, and reminded us that the Architectural Association, alone, was about to turn loose upon the world during the next five or ten years, about a hundred people each year, who intended to practise architecture, and what he said is true of other schools of architecture. He dwelt upon the limited opportunity for practising architecture that they were likely to enjoy. Earlier in this paper it was asked what opportunity would architects have for indulging their inventive faculties in a state which was run by a bureaucracy? Like the medical profession, the architectural profession may eventually part with its independence; and when it loses its freedom it will lose its vigour. But whether in future the architect is to be a state servant, or not, we are now faced by the inescapable fact that the architectural schools of this country are turning out hundreds of trained people per annum—to do what?

Mr. Jordan suggested that they should be trained to take part in industrial design. He said that they should learn what Gropius taught many years ago at the Bauhaus—learn to make what they designed. Mr. Jordan is right about the attention which should be given to training potential industrial designers who are now studying architecture; but it may be doubted whether the methods of the Bauhaus would prove anything but a deplorable handicap for those who intend to understand industrial production, and to understand the problems of the industrialist. The Bauhaus training tended to implant such a reverence for materials, that many an imagination was emasculated by the functionalist ritual of worshipping their virtues. We should have confidence in our own great capacity as teachers of industrial design, especially as we have in Britain some of the finest designers in the world and some of the most progressive industries.

If the architect is to become the master designer of the second industrial revolution, he has to win the confidence of the industrialist; and become, as a technician, more closely associated with the achievements and deliberations of organized industry. A significant step in this direction was taken by your President last year, when he spoke, as the guest of honour, at the Silver Jubilee luncheon of a great industrial organization. At that luncheon, to celebrate the 25th anniversary of the British Cast Iron Research Association, your President mentioned the increasing interest of his profession in the research work and development of great industries. The fact that he was invited to speak as the guest of honour on that particular occasion is in

itself a most significant indication of the readiness of industries to acknowledge the potential leadership of the architectural profession. That occasion was only one of many indications that British industry is now in a receptive mood. But the impulse for leadership in design must come from within the architectural profession. This is the moment of opportunity. A great American industrial designer, who is also a great American architect, Walter Dorwin Teague, has expressed in the fifteenth chapter of his book, *Design this Day*, the following views:

'Our industrial age,' he writes, 'has advanced so far that its tools are beginning to be understood and controlled as well as in the days of handicrafts. As a result, we see the re-emergence of pride in skill, and delight in things skilfully made; but we see, also, evident in many men of creative gifts, a stirring of impatience with restrictions, a restlessness at the confinements of specialization. There are engineers who feel an urge to experiment with the building of houses as well as automobiles, or try their hand at a mechanical solution of the farm problem; and architects who find building construction too narrow a field for their activities are bold enough to want to plan the communities in which their houses are to be built and the equipment that goes inside the houses. Most striking of all is the rise, within half a generation, of this new profession of Industrial Design, in which one man of restless mind and many interests assembles around him a group of variously trained co-workers—architects, structural and mechanical engineers, painters, sculptors, craftsmen, investigators and writers—and directs their group efforts in an astonishingly wide range of activities.'

There, Walter Dorwin Teague sets down an accurate specification of the industrial designer's activities and incidentally describes the character and technical diversity of an industrial design partnership. The range and the tremendous meaning of the industrial designer's work, now and in the future, are as apparent as they are inspiring to all men with creative minds. By training, by skill, by knowledge and by a wise, far-ranging regard for the visual and social welfare of his fellows, the architect is better fitted than any other technician to initiate and nobly to discharge the activities and responsibilities of the industrial designer. Under his direction the second industrial revolution may become a triumph and not, like the first, a visual disaster for civilization. Guided by the trained imagination of the master designer who has won back his mastery, the sense of sight may be restored to its former eminence in this country, and ugliness, waste and inutility may within a few generations, be just old, unhappy memories.

DISCUSSION

Mr. Gordon Russell, C.B.E., M.C., R.D.I.: I have listened with the greatest interest to the lecture which my old friend John Gloag has given us. He is a person of tremendous experience and enthusiasm. Speaking in the headquarters of the architectural profession, he would naturally and reasonably say a great many nice things about architects, but can he make out a case that any 18th-century architect was a complete arbiter of taste? A tradition of craftsmanship came down from the Middle Ages which was at least as important as the architectural tradition imposed in the 18th century.

Mr. Gloag goes on to say that until the architect resumes his responsibility the character of industrial design will continue to depend upon chance. I must remind him that there are already a good many designers who are taking care of this outside the architectural profession. If he means that we all depend upon chance until somebody decides what we shall do about atom bombs, I would agree; but I would not agree that this matter will be put right immediately the architect comes into the picture. I think it will be just as difficult for the architect to convince the business man as it is for the average industrial designer.

He then says that to be realistic an industrial designer should not practise industrial design as a form of philosophical uplift. If you translate that into English it seems to me that you must not expect the industrial designer to believe in what he does. That, of course, is exactly what has landed industrial design, especially in America, into things like the new American motor-car, which an American described to me the other day as 'Whales on land with their toenails polished'.

Then Mr. Gloag goes on to say 'or in the arrogant missionary spirit which emanates from the belief that all industrialists are coarse, ignorant obstructionists, panting for profits, and averse to progress.' Well, I agree with that and I must say that it is much plainer than the first paragraph, but he follows that up by saying that the Council of Industrial Design's only job is to collect progress charts, case histories, facts, figures, and so on, to prove that industrial design pays, because he says 'it is the only way that many of them can understand'. Well, he cannot have it both ways. I think we all agree that if you are making an article you must be able to sell it, but I do think there are a great number of manufacturers in this country who believe in doing a good job of work.

Just after the last war but one I looked around and saw that over the previous 15 years some of the best and the worst furniture had been designed by architects. The best furniture had been designed by architects who took the trouble to find out how furniture was made. The worst furniture had been designed on the drawing board and did not work very often. Therefore, in my own office I had a number of architects and architectural students from time to time who worked alongside people who had graduated from the bench, and I think that was a very fruitful collaboration. The architect is needed in industry, and if he is working as a member of a team he can make an extremely valuable contribution to industrial design, because if you approach it from the other end, namely that of the artist, the artist cannot see himself as a member of a team at all.

I hope that we shall see a great many more architects coming into industrial design, but what I also hope very much is that they will not look upon industrial design as a kind of spare time job. I hope they will consider it as something which, if they come into it at all, has to be taken seriously, and that they will be prepared to make a contribution which is very important at this moment when we have a better chance of getting a higher standard of industrial design.

I have very great pleasure in proposing a vote of thanks to Mr. John Gloag.

Mr. G. Grey Wornum [*F*]: I think it was a very happy day when Mr. Gloag received the honour of an Honorary Associateship in this Institute, because in the 20 years that I have had the great pleasure of knowing him and calling him my friend, he has never ceased to work for what we might call our cause; in other words, to see that the architect gets his proper recognition and that his province is also recognized and not too much curtailed.

I had the honour to represent this Institute at the Tercentenary Celebrations at Columbia University this year, and during the course of a discussion on industrial design and how people should be trained for it, one architect got up and really blew everything sky high by saying he considered that the ideal industrial design should result in objects not even being noticed or criticized. When one analyses that it is seen that there is a great deal in it.

A little while ago an industrial friend of mine sent along to me a request for a design for an everyday domestic article. He asked first of all whether I would produce some sketches of it which, he said, he was willing to pay for. I said to him that the first thing I should want would be a screwdriver to take the thing to bits, and I should want to visit his works and see how the components were assembled. He replied: 'You do not understand. I want you to make me some sketches of what you think the ideal thing should look like. You leave it to me how it is made; that is my affair.' So long as industrialists, despite Mr. Gloag's intense efforts, and he has been successful, regard design from that point of view we shall not get very much further.

With the release of what must be a lot of labour and designers' time with mass produced articles I do hope that there will be some attempt at creating pieces of nonsense, because I think that is what we shall need as well. If we can divorce our minds from a lot of conscious criticism of utilitarian things around us we shall be able to have some pleasure for our eyes from things which are entirely non-utilitarian.

In conclusion I think Mr. Gloag has raised an important point which many of the younger members who are considering what part they can take in industrial design will want to go into and that is with regard to the professional status of the industrial

designer. I cannot see any compromise at all between touting for work—if I may use that expression—and keeping within our code of professional practice. For that reason I think it is likely that the architect serving today is only in an interim period, and that what it will have shown will be that the architect's training is the right basic training for the industrial designer of the future. Therefore, many young people here who may be considering a career in industrial design may rest assured that they are not by any means doing the wrong thing by training as an architect first.

I have much pleasure in seconding the vote of thanks.

Mr. R. A. Riding [*A*]: It seems to me that the first question is: what is design? Is the final result of the Royal Scot design or is it not? Is it perfect fitness for purpose?

You have in this work—and I have had a lot of experience—to come up against the hard-headed business man, and you very soon find out his power. An engineer will spend without a blush £1 million on generator sets for a power station, but when you mention paying an extra thousand pounds for suitable buildings in which to house the beautiful machines he laughs.

Mr. A. L. Roberts [*F*]: I should like to put in a strong plea for the architect in that he is a man who is trained to think, and when he comes in contact with things which are not in his ordinary way of business he begins to think about them. I have recently been in Moorfields Eye Hospital, and there I took up many points affecting industrial commodities with my surgeon. He told me that he entirely agreed with me, but pointed out that they did not get people in the hospital who thought about those things. He said things were used because they were made by manufacturers, and they did not apply their experience in producing things which are better to supply.

Mr. Gontran Goulden [*A*]: What training is there going to be for industrial designers? The architect receives a training which in five years may fit him or make him suitable for consideration as an industrial designer, but it is not everybody who can afford to spend five years before he starts training for his ultimate job. What is the programme? Has the Council of Industrial Design any plan for the training of industrial designers?

Mr. H. C. Morris: This question has come up at the AA recently, where students have been discussing it and have made certain observations which are, I think, in places at variance with Mr. Gloag's statements. I should like, if I may, to read some extracts from the A.A. Education Subcommittee interim report. They are:

'We think it important to note that in our opinion the creation of an industrial design course, open to architectural students, whatever its nature, should not be considered as an escape outlet for employment in the absence of architectural practice. It must be considered on its own merits quite apart from the adverse economic situation in the building industry.

'We see industrial design and architecture as inseparable, as parts of one whole. They have in common the design process which precedes the creation of almost all consciously produced three dimensional objects. The introduction of an industrial design course, therefore, would indicate alterations in our training as architects. If an appreciation of the problems of industrial design were introduced early in the course it would be of equal benefit to architecture and industrial design.

'There is more similarity between a prefabricated house and a car, as design problems, than there is between a prefab and a traditional brick and mortar house. The fact that the aluminium house was designed without architects underlines the need for reform in architect's training.

'The argument that the architect-trained man is the person best fitted by the nature of his training to be the best industrial designer is one of expediency only. It may be correct at present, the existing forms of training being what they are; but the creation of a first class basic training in industrial design might change this.

'Who will take this course? What do the manufacturers require of it? What will be its purpose and nature? Possibly the students would come from four sources: art schools, architectural schools, technical colleges, and industry itself. In the course the aim should not be to produce a fully qualified specialist in any one branch of industrial design, but rather a designer trained and qualified to specialize further, as his own interest, or that of the manufacturer employing him might dictate.

'We oppose the idea that industrial design students should be picked out and trained by and for manufacturing firms. Employment should be chosen preferably at the end of the course. The standard of design cannot easily be maintained if it is allowed to be dependent on the goodwill and taste of the manufacturer-patrons.'

Mr. B. L. Myers: I disagree with the assertion that the artist is working from the other end to the architect So far the principal schools of design in the country have been the Royal College of Art, and the Art and Crafts School; then there is the Camworth Art School with the highest number of aggregate prizes in art competitions, and there is the new School of Industrial Art.

I also disagree with the statement that when you have restrictions and controls that the designer has not such a great chance. For instance, it was when competition was at its highest in the 19th century that the architect and artist lost all control over design, and in the United States we have the great example of the Tennessee Valley Authority with its system of control on the one hand, and the motor-car design which resembles a mouth organ on the other.

Mr. Mark Hartland Thomas [*F*]: I support the suggestions we have just heard from the students of the A.A. School, but I would mention one small correction, that is, that the aluminium house did have an architect.*

The important thing is to realize that industrial design, architecture and town planning are parts of the same large discipline. Industrial design is not something separate but something that should clearly be closely linked with architecture. I should also like it to be very strongly realized amongst architects that the mere fact that we are architects does not guarantee that we know everything. So wide are our interests that there is a tendency for us to become 'know-alls' and claim that, by virtue of being members of this Institute, we could do the other man's job better than himself. Therefore, I do call the attention of this meeting to the way in which Mr. Gloag put his case. He did not tell us that because we were architects we did this, that or the other. He told us that we had a responsibility and an opportunity—which is a very different thing indeed.

Mr. Victor Taylor: Industrial progress to my mind is now ripe for new developments in the whole field of humanities. This is not to be restricted to the architect's province, but I rather envisage the architect working in a group of specialists developing a new art form which would be part of the civilization which is developing now.

It is the question of the training of industrial designers which is impeding the progress of industrial design in the country more than anything else. The art schools are not making too good a showing in industrial design, and I think a solution to the problem would lie in practical industrial designers co-operating with small groups of students in solving the day-to-day practical problems plus the conception of æsthetic factors which must be involved and, most important of all, the appreciation of materials being used.

Mr. Michael Waterhouse [*F*]: This is a matter which I have often discussed with a friend of mine, who is in the electrical engineering industry. He has always emphasized the extreme necessity for design in electrical engineering, and the great need in that industry—and, indeed, in others—for the designer to know not only the alphabet and simple grammar, but a good deal of the exact language of the industry in which he is going to design.

In the electrical engineering industry a large number of university graduates are absorbed who work their way to the top. They have introduced the graduate apprenticeship scheme in that industry because they found that university graduates who came in at the bottom and learned not only the alphabet of bench work but also the companionship of the boys and men who worked on the bench, used that knowledge to advantage later on when they became superior technicians or designers.

Mr. J. Howard: I am an industrialist, but following on what the last speaker has said, I should like to suggest that one of the most

*A. F. Hare [*A*] and Partners. Ed.

important points to bear in mind is that the designer should be a craftsman and, as such, I wonder seriously whether the training received by an architect is the best training at all. Should not the designer really have an engineer's training both practical and theoretical? I think it might fit him out for the job better.

Mr. Milner Gray: As President of the Society of Industrial Artists and not being an architect I feel rather shy in getting up and facing so many architects in their own headquarters. There was, however, one point made by Mr. Gloag which I feel I should, as President of my Society, take up, and that concerned the suggestion that discussions might be instituted between this Royal Institute and my own very young Society.

The Society of Industrial Artists has been in being for less than two decades, and whilst we are trying to do a useful job of work, we have still a long way to go and in my opinion it would be of great help, and possibly far reaching in its consequences, if these discussions proposed by Mr. Gloag could take place. Although I should have liked to have had notice of this question, I feel sure that my Society would welcome the proposal.

On the question of training, I believe that the training received by an architect is probably the best training in being today, because the architect is taught to think in terms both of æsthetics and techniques. Until the engineer or the designer is taught on the same basis, I do not think their training so appropriate although in many cases it might appear more so.

Mrs. Tomrley: As an onlooker I see a good deal of industrial design, and I am convinced that the young architect who wants to become an industrial designer in light engineering must be able to read a factory as a working drawing. Factory life always seems to me to be something absolutely on its own, and short of a good deal of experience in factories of various kinds when a man is young, I cannot see how we can develop the sympathetic imagination which will make him acceptable to a manufacturer in one of the heavy or semi-heavy industries.

Mr. E. D. Jefferiss Mathews [*F*]: Mr. Gloag said that the architect is the master designer, and I feel that that is the main line of approach of our profession to industry. We should be of big enough mind to know when to call in an expert and to co-operate with the expert in all stages of production. As has been said, the architect is taught to think, and if his method of approach is allied to that of the particular expert, then the results are usually satisfactory. To use a modern word more appropriate to commercial life, it is to use the architect as a co-ordinator.

Mr. D. E. E. Gibson [*A*]: Quite recently we have had rather a pleasant surprise in my city of Coventry. We have been trying for a long time to make things better, and these are some small examples of things which are happening.

The other day we had the prospect of building some new lamp standards. G.E.C. were going to do them, but our electricity engineer sent along designs for us to look at, and we thought we might do something better, so we have designed some now which the electricity engineer and the G.E.C. are making.

The city engineer who, years ago, always designed the bollards and so on, two weeks ago asked us if we would design for him some new ones for the centre of the city, which we are now doing.

The transport department designed green bus shelters for the country areas, but the green chosen was of such a nasty shade that it did not please the eye, and they sent painters to us to get a colour which we considered might go nicely with the countryside, and that has been done.

The thing which surprised me was that once you have contacted people how quickly they respond. We have to make that contact with industry or with the people who are going to make the things.

Mr. H. A. Furness [*L*]: As I understand Mr. Gloag he has, in his lecture, argued that if architects are put in charge of industrial designs everything in the industrial design garden will be lovely. Having done that, are we going to flood the country with properly designed objects and, if so, what will happen to them?

Mr. Gloag has emphasized that anything designed industrially is for sale to the public at a profit. Nothing has been said by anyone yet that some kind of appreciation of design must be got over to the general public who at present do not appreciate it.

Mr. Guy B. Oddie [*A*]: I think the last four speakers' remarks can be tied together by the statement that the function of an architect was that of co-ordinator. The formation of a good public taste is the thing which has led so many architects in my generation and in the one before it to rush after so many red herrings.

If, however, we realize that our main function is that of co-ordinator, and demand that everything which goes into our buildings must be of good design—and an increasing number of good designs encourage us to think that that task will not be so difficult in the future—then people who come into those buildings and see an example of good taste will, in turn, demand more, and perhaps we may eventually see the same level of good taste and the demand for beauty which so distinguished England in the 18th century.

Mr. W. N. Jordan: I am an industrialist, and I am very interested in design. I think the function of design could be grouped in at least two ways. First, there is the design which affects the charm of shape, proportion, colour or pattern; then there is the design for production. It seems to me that if you have an architect designer he is very much in the way of a consultant, and a consultant is not enough in my opinion. He must co-operate all day and every day with the works and with works production.

Mr. John Gloag There are one or two points I should like to cover in thanking you very much for listening with such patience to my occasional impropr[illegible]eties, and for telling me afterwards a number of things I did not say!

What I mean by 'philosophical uplift' is using a lot of arguments which may be very moral and very fine, but, for heaven's sake, if you are technicians, talk as technicians and then you will be taken seriously as such. There is far too much obscuring of difficult problems by talking with endless wind about the whole subject and hiding the fact that industrial design is really a combined technical job.

Mr. Hartland Thomas really underlined everything I tried to say which cheers me up very much, because as Mr. Hartland Thomas is in charge of industrial matters at the Council of Industrial Design and is also an architect, I can see a bright future.

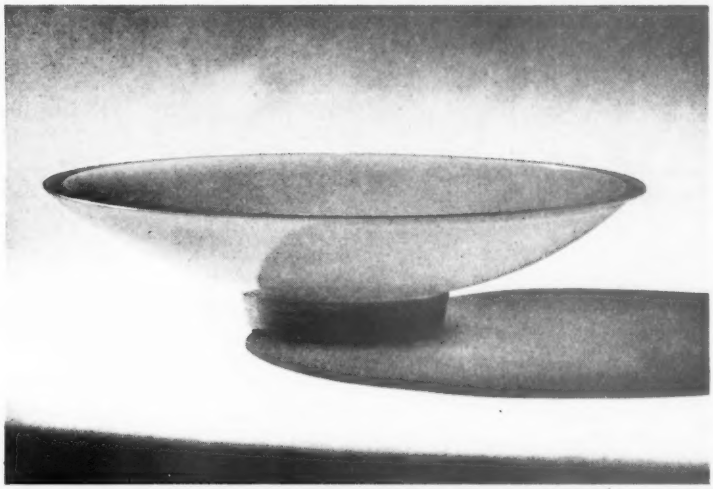
A few speakers have rubbed in the fact that an architect is a co-ordinator and if, as one or two industrialists have said, an architect seems a little unsatisfactory when called in as a consultant, surely that is the fault of industrialists for not saying: 'Here is my production engineer, here is the chemical chap, here is the metallurgist, and here is the factory manager. Now get together and plan what I want to produce.'

Mr. Myers did not agree with what I said about bureaucracy, and cited the Tennessee Valley Authority as an example of what could be done, presumably, by bureaucracy in operation. I have heard a lot about the T.V.A. for years. My left wing friends said it was a triumphant example of socialism in action. My Tory friends said it was a rather weak adaptation of a public utility company and did not mean anything. In the United States my Republican friends described it as 'Uncle Sam's billion dollar baby', and my Democratic friends said it was one of the greatest examples of enterprise which stirred that magnificent country. I had a bit of an argument with Mr. J. B. Priestley about it, and he said: 'Why don't you go and see it', so I did. I saw some of it last year, and I consider that the T.V.A.'s work is world public enterprise No. 1. It is absolutely magnificent, and the results are astonishing. It is re-creating life in the entire Tennessee Valley area, and the T.V.A. officials who took me over some of the projects said there were three great things which the T.V.A. has accomplished. (1) It has fought and defeated bureaucracy at Washington. (2) None of the appointments are political, so the American 'spoils' system of political appointments was smashed in this instance, and (3) cheap and abundant power has been released in the area covered by the T.V.A. for the encouragement of private enterprise, starting up new businesses, and competitive businesses.

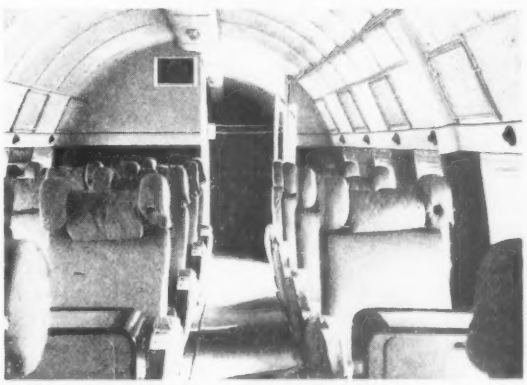
Finally, I would say this, that it will take another five generations before we can undo the work of the 19th century, and it is only our great-great-grandchildren who will reap the benefits of the work which I hope all young architects and architectural students in this room will do and do brilliantly.

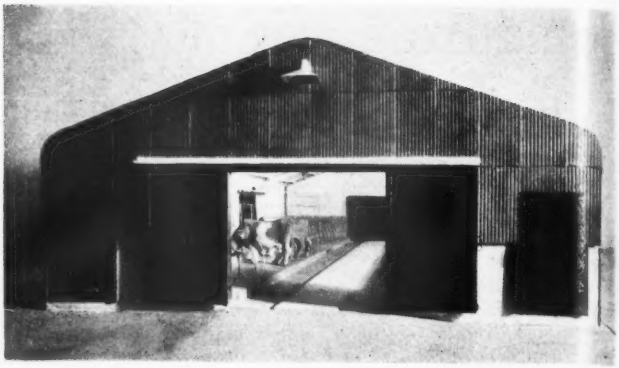
Some Examples of Industrial Design by Architects

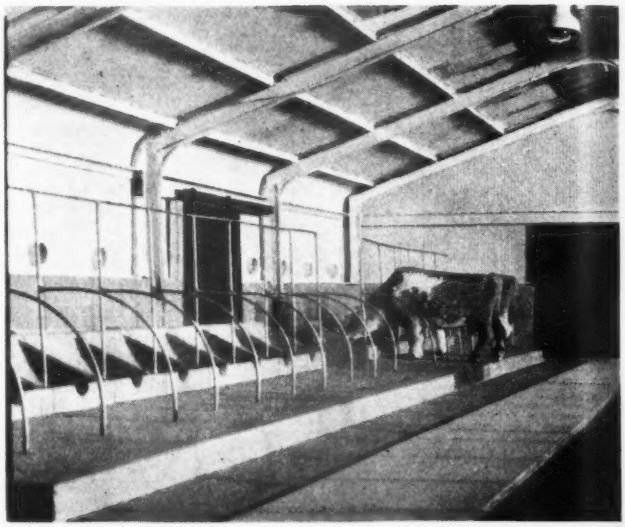
'No architect should assume responsibility for industrial design unless he has the inclination and capacity to make his work in that enormously varied field, effective, practical, and most important of all, realistic.' John Gloag



Above: glassware by R. Y. Goodden, R.D.I. [*A*]. Pressed glass fruit bowl in translucent green glass. Pressed glass flower-pot vase in smoke grey glass. Family of pressed glass bowls, machine made, in clear white glass. Below: interior of Vickers Viking aircraft for British European Airways by Brian O'Rorke, A.R.A., M.A. [*F*]. Seat with food tray and general view of interior

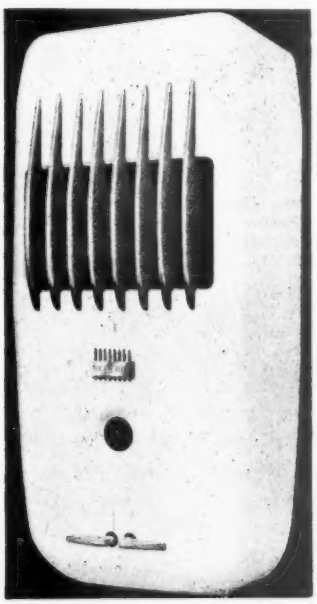




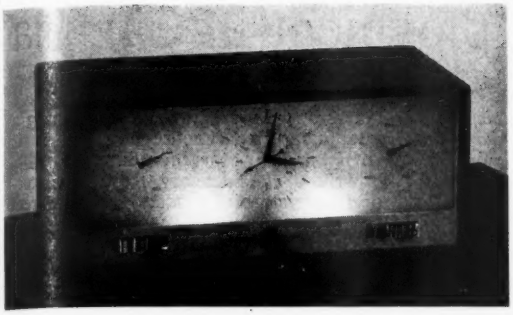


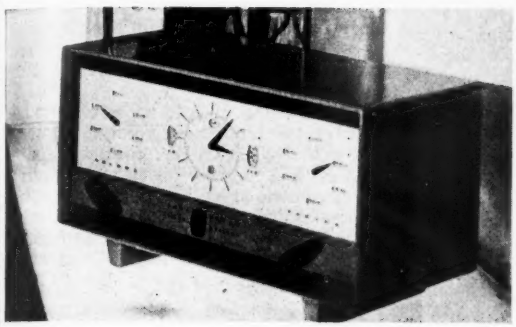
Above: L.P.T.B. Kerbside Queue Shelter by D. Dex Harrison, A.M.T.P.I. [*A*]. Design selected in competition to replace existing austerity type shelters. The finalized design has been detailed in the alternatives of laminated timber and cast aluminium. Both designs are treated in a bright colourful manner and the parts are all interchangeable allowing variations such as a timber roof and aluminium supports

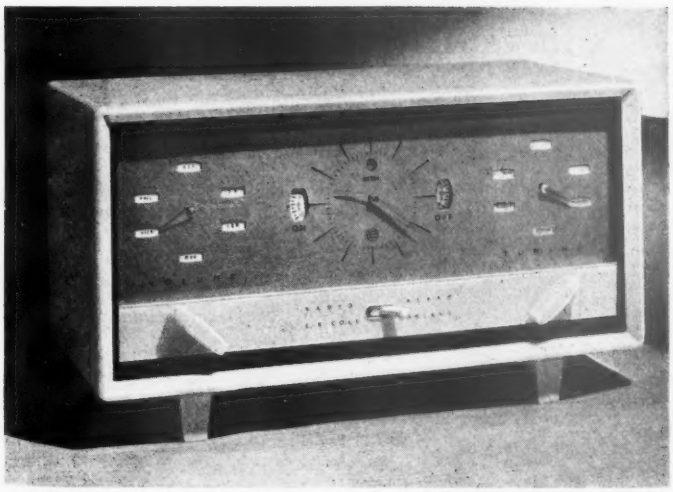
Right: two views of model of prefabricated steel cowhouse by Frederick Gibberd [*F*] and Gerhard Rosenberg [*A*]. One of a series of farm buildings using light welded steel frames and heavy corrugated sheeting. The structural system was designed to a unit dimension to enable various kinds of buildings to be mass produced. Below right: steel office desk by Roneo, Ltd., with Frederick Gibberd [*F*], consultant designer. One of a series of desks designed on a unit principle with interchangeable parts



Gas water heater casing by G. Grey Wornum [*F*]







EKCO radiotime set by Wells Coates, O.B.E., R.D.I. [*F*]. Top left: first model of project based on attempt to incorporate an electric time-switch clock with a radio set and a downward speaking loudspeaker. Bottom left: second (prototype) model evolved after acceptance of general idea. Thereafter detail arrangements and modifications were the subject of dozens of conferences with the engineers, technicians of all kinds, the clock makers, the sales and publicity managers, etc. Through them all the designer adhered to his original conception of a unit just right for a bedside table that was neither a 'midget' set nor a normal table model. The whole development took 2½ years. Above is the final production model of 'A.33 Radiotime'

The Coronation Scot train for the L.M.S. Brian O'Rorke, A.R.A., M.A. [*F*]. Interior view of the First Class Lounge showing cocktail bar

Prospects of Architectural Employment in Canada

We are very grateful to the Royal Architectural Institute of Canada for sending us an informative pamphlet under the title of *Architectural Employment, Conditions in Canada*, which we reproduce below in full:—

From many different points in the Empire, enquiries are being received by the Royal Architectural Institute of Canada and its members, regarding the prospects of Professional employment and opportunities for practice in Canada. The general outline which follows is an attempt to answer these enquiries.

At the present time the situation is, as elsewhere, rather unsettled and some hesitancy is evident. There is a fairly large volume of work in prospect, which includes the accumulated back-log from the war years.

There is a shortage of experienced draughtsmen. There is also scarcity of both essential materials and skilled workers in some branches of the building trade. The rapid increase in the cost of construction is causing apprehension, especially in the field of housing. Such are the present conditions. The construction industry anticipates a period of much activity when present difficulties are overcome.

As to the prospects for the newcomer on the scene, it is but fair to point out both the possibilities and the difficulties.

The four Canadian Schools of Architecture are crowded with students. In the natural course of events, most of the graduates of these schools will find places as practising members of the profession, and the numbers should fulfil population demand.

It must be pointed out that Canadian practice follows American rather than English practice, and therefore, both architects and architects' assistants emigrating to Canada must be prepared to adapt their background of knowledge and competency to conditions which will have to be thoroughly assimilated if the newcomer expects to succeed.

The conditions referred to include building methods, unfamiliar materials, presentation of drawings and details, the law as it affects architects and building contracts, details of construction as developed to meet climatic conditions, the relation of the architect and the contractor, all of which differ in whole or in part from the English practice. Knowledge of such things can of course be gained by enrolment in one of the four architectural schools, but for the practitioner already qualified in another country, the only practical way to gain sufficient experience of Canadian requirements to qualify for practice in Canada, is to work under a Canadian architect.

It is not the intention of these remarks to discourage those who are interested, but it would be unfair to minimize the difficulties. Many architects now practising with success in the Dominion came from other countries, but of these very few came as fully fledged architects. Most of them were in their twenties on arrival, and with a thorough background of Old Country training they were not too old to assimilate that knowledge which is necessary to success in any special area of application.

It must also be said that of the Architects of more mature years and experience who emigrated to Canada, some found the way both hard and discouraging because their advanced experience proved a handicap to the necessary adaptability.

Let not these warnings be misunderstood—Canada owes much to architects from older lands and is not unreceptive to their latter day skills and techniques, which so amply demonstrate that architecture still lives as a creative art. But—the mere transplanting of such skills and such techniques to Canadian soil is not enough. There is a body of sound Canadian practice which has been built up on a basis of local knowledge hardly gained, and any transplanting must be nurtured with the application of that knowledge.

To sum up: *Opportunities for the right parties are without doubt present in Canada, but this opinion must be qualified by the warnings before mentioned.*

The choice of location is something which only experience and temperament can determine. No country on earth offers a wider choice of climate and amenities.

Architects like other groups include all sorts and conditions of men. Canadian architects are no exception, but it may fairly be said that the profession as a whole offers a welcome to well-trained representatives from all parts of the Empire.

In the final analysis, ability, character, hard work, and a faculty for adjustment are the requirements for success in the practice of architecture in Canada, as in every other field.

In all Canadian provinces the practice of architecture is governed by regulations set up under provincial law. There are variations in such law, as between provinces.

It is most desirable that architects holding certificates to practise in other parts of the Empire should make preliminary enquiry as to their status, if proposing to settle in Canada. Such enquiry should be addressed to the Secretary of the Royal Architectural Institute of Canada, 74 King Street East, Toronto, Ontario, Canada.

The proposed location in Canada should be mentioned and the Institute will then refer the enquiry to the appropriate provincial association of architects for reply.

To anticipate probable enquiries from members, we put to the R.A.I.C. a series of supplementary questions, and their prompt and helpful replies are summarized below:—

1. The chances of an architect obtaining employment in Canada before leaving the United Kingdom are so slender as to be negligible: Canadian architectural firms, like ours, do not as a rule engage assistants without first interviewing them and appraising their drawings. The architect, therefore, who is desirous of obtaining a post in private practice in Canada is advised to follow this procedure:—
(*a*) write to the Secretary, Royal Architectural Institute of Canada, 74 King Street East, Toronto, for any general information which is not given in this article;
(*b*) write to the secretary of the provincial association of the province for which he has a preference, asking for local detailed information; and—just on the off chance—enquire whether there are any existing vacancies for which he might apply. (Secretaries of these provincial associations are sometimes in a position to put an applicant in touch with a firm.)
(*c*) Architectural students are advised to remain in the United Kingdom until they have qualified for R.I.B.A. membership. In most of the Canadian provinces a student must complete at least one year's practical experience in an architect's office before he is eligible for membership of a provincial association, and it is natural that most of the student vacancies are filled by Canadians.

2. As a rule, corporate membership of the R.I.B.A. is a sufficient qualification for membership of any provincial association. The registration authorities, however, reserve the right to examine, at their discretion, any candidate—specially in the subject of professional practice.

3. An experienced draughtsman earns between $60 to $100 a week, according to his experience and ability. (Rate of exchange in London at the time of going to press: 4.02¾ selling, 4.03½ buying.)

4. The designation of 'senior assistant' is little known in Canada. Next to the principals and the chief draughtsman, the most responsible men in the office are 'job captains'. who, though not necessarily academically qualified, are senior draughtsmen of long experience. The term, however, does not denote a particular position: it is applied to persons who are entrusted with a responsible task, which may entail the carrying out of a commission in its entirety.

Finally, the architects of Canada are intensely busy, and extensive building programmes are in operation all over the country. It is not, of course, possible, to foresee how long these healthy conditions will last, but there is no doubt that at present the services of architects are in urgent demand. Their greatest need at the moment is for experienced draughtsmen, and it is suggested that members who are eager to go to Canada should seek employment in that capacity. We are informed that provided they have sufficient experience and adaptability, they should have no difficulty in obtaining a suitable post.

Note.—Copies of the R.A.I.C. pamphlet, and the address of the Canadian Provincial Associations, may be obtained by application to the Secretary, R.I.B.A.

The A.A. Centenary Celebrations

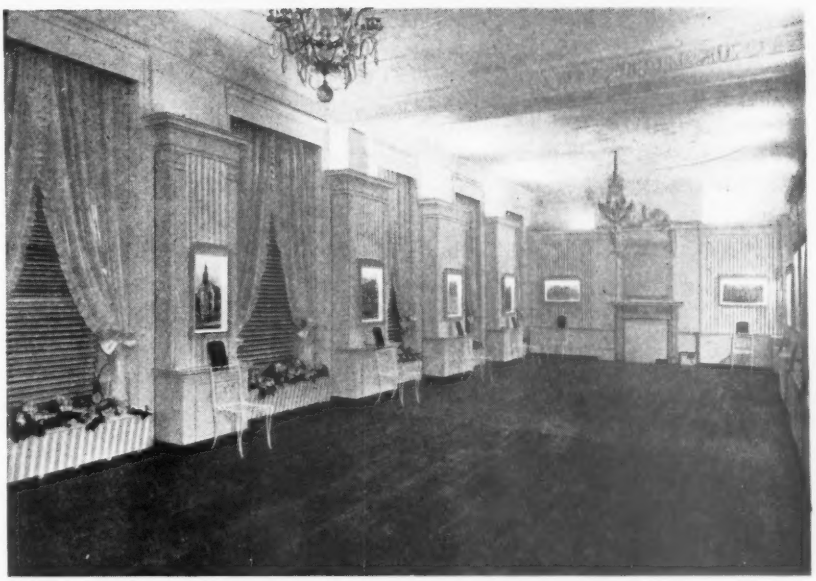
Walk about Zion, and go round about her: tell the towers thereof. Mark ye well her bulwarks, consider her palaces; that ye may tell it to the generation following. For this God is our God for ever and ever: he will be our guide even unto death. Psalm 48.

From this text the Dean of St. Paul's preached his sermon at the Commemoration Service which was a moving and beautiful feature of the A.A. Centenary celebrations. Held in Hawksmoor's Church of St. George's, Bloomsbury, it seemed, even to those who do not profess a religion, a symbolical gesture of faith in the fundamental spirituality of the art and calling of architecture.

For such an occasion there was also something appropriate in the Psalmist's injunction to study architecture 'that ye may tell it to the generation following', for this was the centenary of an institution which exists almost solely for that purpose.

The official celebrations began with an informal reception of delegates from the Dominions and foreign countries by the President, Mr. Howard Robertson [*F*], Mrs. Robertson [*A*], and the Council. For many years the A.A. has taken students from the British Commonwealth, and its associations with European countries, particularly Sweden, Norway, Denmark, Holland, Czechoslovakia, France and Switzerland have long been close. Among the guests were several Honorary Corresponding Members of the R.I.B.A., notably Mr. Hakon Ahlberg of Sweden and Professor Edvard Thomsen of Denmark; while several other continental architects well known to the R.I.B.A. were also present; these included M. Vago of France, a leading figure in the International Reunion of Architects; Mr. Conrad Furrer, who designed the Swiss Exhibition; Mr. Krejcar, who arranged the Czechoslovak Exhibition; and Mr. Van der Steur, whose recent speech to the R.I.B.A. Council was reported in the November JOURNAL.

On the afternoon of Wednesday 17 December the Centenary Exhibition at Bedford Square was opened by Sir Ernest Pooley, Chairman of the Arts Council of Great Britain. For this the public rooms and two of the studios were delightfully transformed. Past work was illustrated by the work of Past Presidents up to the year 1900 in a series of photo-lithographed drawings and some perspectives which were all framed and individually illuminated in a charming setting to which our illustration does not do full justice. The work of Past Presidents and Principals from 1900 to 1947 was shown in the two Members' Rooms in another beautifully designed setting. The Slide Collection Room was a 'Scrap Book' of prints, drawings and documents illustrating the 100 year life of the A.A. and included four sculptured models depicting the premises which the Association has occupied. On the floors above was the section dealing with the contemporary work of the school; this could have been a mere sea of drawings but was refined down to a selected few, punctuated by models. The whole was designed by the Fifth Year Master, Mr. Colin St. Clair Oakes, M.B.E., Rome Scholar [*A*], who was helped by a team of able assistants, many of whom were students.



Two views of the Centenary Exhibition. Above: one of the Members' rooms. Below: the Library

The ability of the A.A. to 'throw' a party was excellently demonstrated at the Centenary Reception and Dance held at the R.I.B.A. Mr. Wornum's grand suite of rooms and staircase has never held a more colourful or happier throng. Members came to it from great distances; one flew in from Jersey that afternoon specially for the occasion, though the distance record was held by Tha Tun, the delegate from the Dominion of Burma and an ex-student of the A.A. There was certainly dancing going on but most members were happy to spend the time greeting old friends.

The second day began with the Commemoration Service, which was followed by a cocktail party and fork luncheon for delegates at the Building Centre. The guests were welcomed by Sir Giles Gilbert Scott, R.A. [*F*] and Mr. F. R. Yerbury [*Hon. A*] who when Secretary of the A.A.

The President, Mr. Howard Robertson, greets Professor Thornton-White [*F*], South Africa

Top: at the Centenary Reception and Dance. Middle: at the Students' Centenary Dance

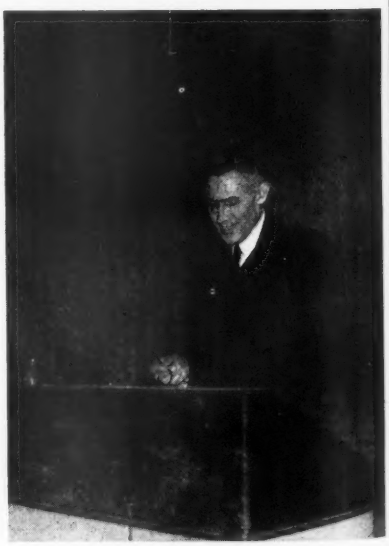
had organized many A.A. continental visits, so that he was greeting many old friends.

A Conference was held at Bedford Square in the afternoon when the A.A.'s principal scholar, Mr. Hope Bagenal [*F*] delivered a paper, 'English Architecture since 1847'. The wisdom of the A.A. Council's choice of speaker was manifest as the audience listened entranced to a profound, learned yet witty discourse in a prose that few architects can achieve.

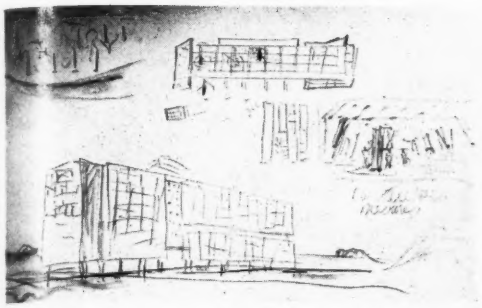
In the early evening the British Council entertained the delegates at a cocktail party, which was a pleasing gesture of official governmental goodwill towards the A.A. and its guests. Later the delegates and A.A. notabilities attended the gala performance of the students' pantomime: 'A.A.—She's my Baby'. This related an entirely fanciful history of the A.A. beginning with crazy gang fairies round the baby's cradle and proceeding, through various divertissements, to courtship by highly amusing personified stylistic conventions and eventually to marriage with true love—modern architecture. As was to be expected, the decor was brilliant, and even if the book could have done with some pruning, the action had both hilarious and moving moments.

On the last day the foreign and dominion delegates were taken by coach to see a typical example of town planning and housing at Ashford, being entertained to lunch by the Ashford Council and having the town planning scheme and Osborne Road Housing Estate explained and shown them by Mr. Henry Braddock [*A*], who is the present Hon. Treasurer of the A.A. They returned in time for the Centenary Dinner, given by the President and Council at Bedford Square. For those who were fortunate enough to be present it was perhaps the most enjoyable of the functions. The guests included no less than 20 Past Presidents of the A.A., the President and Secretary of the R.I.B.A., the senior members of the School Staff, and several persons of eminence who are interested in architectural education, including Viscount Samuel and Viscount Leverhulme.

After the President, Mr. Howard Robertson, had welcomed the guests, Viscount Samuel proposed the toast of the A.A., which was responded to by Mr. H. S. Goodhart-Rendel [*F*], Past President of both the A.A. and the R.I.B.A., and Chairman of the Centenary Committee, and by Mr. W. Curtis Green, R.A. [*F*], who is the senior Past President of the A.A. The diners then rose and grouped round six television sets to 'view' a discussion on the architecture of tomorrow between Mr. John Summerson [*A*], Mr. Hugh Casson [*A*], Mr. Serge Kadleigh [*A*] and Mr. P. A. R. Dickenson [*Student*]. They referred to the dinner and sent a message of goodwill. After that most novel interlude, the Hon. Humphrey Pakington, O.B.E. [*F*], Past President of the A.A., proposed the toast of the guests, which was responded to by Hakon Ahlberg of Sweden, who presented



Mr. Hope Bagenal [*F*] at the Conference

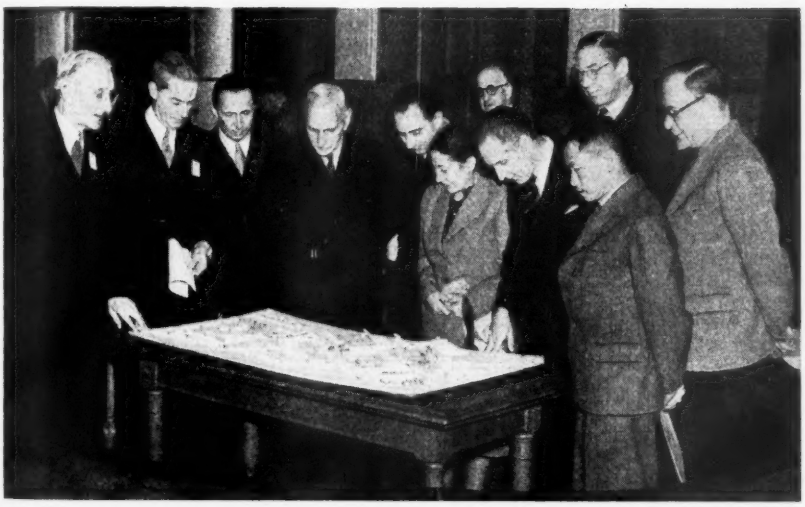


M. Le Corbusier and one of the sketches with which he illustrated his talk to the students

Four delegates outside the A.A. L. to R.: Van der Steur (Holland), Boeyinga (Holland), Tschumi (Switzerland), Vago (France)

Models of the four homes of the A.A. with paper sculpture

Programme sellers, students' pantomime



At the reception of delegates: Mrs. Howard Robertson [*A*] and Mr. F. R. Yerbury [*Hon. A*]

Delegates at Ashford. L. to R.: Boeyinga and Van der Steur (Holland), Krejcar (Czechoslovakia), J. M. Dawson (New Zealand), Tschumi (Switzerland), Mme. Krejcar, Vago (France), Professor Thomsen (Denmark), Tha Tun (Burma), and Professor Thornton-White (South Africa)

addresses and gifts from the Royal Academy of Fine Arts of Sweden and the S.A.R. This was the signal for other guests to rise and make speeches of goodwill and congratulation and to present gifts.

Mention must be made of the students' programme of celebrations. This began with a week's programme of tours to visit and study the life of London—an excellent idea, very well planned and most successfully carried out. This ended with a crowded but enjoyable all-night dance at Bedford Square, where design ability and sense of humour, typical of architectural students, had been expended on the decorations. During the week of the official celebrations the students ran a series of talks by the foreign and dominion delegates and others, including that idol of students, M. le Corbusier himself, who flew over from Paris, talked and sketched for an hour and a half, and then flew back. The students' programme was terminated by a one day international conference on architectural education, which was attended by the foreign students among the delegates.

The foregoing account of the A.A. Centenary Celebrations must of necessity be brief in a crowded JOURNAL. They closed the first century of the A.A. and opened the second in a worthy manner. E.L.B.

Substitute Materials and their Influence on Design

By G. Grenfell Baines, A.M.T.P.I. [*A*] and Tom Mellor [*A*]

Read at a Meeting of the R.I.B.A. Architectural Science Board on 18 November 1947. Mr. Anthony Pott [*A*] in the Chair

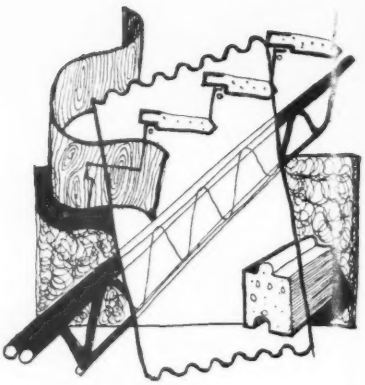
Mr. G. Grenfell Baines: I suppose that for all but professional speakers, and however professional they may be otherwise, architects are generally but amateur orators, it is natural at a moment like this to feel somewhat a victim of circumstance. I do, and I am a boomerang victim, in fact! For it was during the course of my duties as a member of the Architectural Science Board Lectures Committee that I suggested this paper, and when no one could be persuaded to hold the baby, it was steered back in my direction. All I could do was to act in the best 'Group' tradition, drawing in Tom Mellor to share the blow, showing that there are other things to share beside reward. Our way of working has been to deal with the subject separately, and then compare results, adopting each other's ideas in the same friendly way that we raid the resources of the drawing office.

The term 'substitute materials' is accommodatingly vague. It would have been possible to confine ourselves to the effects of those materials forced on us by wartime scarcities, and the efforts of the Ministry of Works, whose outlook, judging by the architecture produced in their foundling days, is not inappropriately one of restraint, but we decided this would be a small field not very fertile, such fruit as we gathered being small, hard, and probably bitter. By adopting a broad definition of the term, we let ourselves into a vast jungle which we cannot hope to traverse tonight. All we shall do is to carve a few ways through the undergrowth in order to examine a number of special details, remarking now and then on the general atmosphere, which to us, at this hour in architectural history, appears to threaten storms and violence, quite capable of directing some of us into various Ministeries or the export trade, before they blow themselves out.

As a conscientious member of the A.S.B. I have wondered whether we were going to be sufficiently 'scientific' in our review, but as we don't seem to have pinned a positive definition on science in our deliberations as yet, I trust we shall be forgiven if we appear to show greater interest in the æsthetic than structural or material aspects. A study of substitute materials reveals immediately two main categories—voluntary and compulsory—that each owes its existence to various social causes, and each has fairly definite effects on design which we hope to give with reservations, and that these effects up to now do allow some conclusions to be drawn. Social causes, impact of voluntary, impact of compulsory, and conclusions. There is the menu. I will serve the first two courses, and Tom Mellor the next two, ending on a very small note of hope which we trust will have the effect of strong black coffee. The social causes are probably well known, but as we had to go through them to start ourselves properly, we thought a brief review would do you no harm.

Although it is commonplace to date many of our present troubles and difficulties from the start of the Industrial Revolution with its accompanying phenomenal population increase, it is no coincidence that with the Industrial Revolution we saw great changes not only in the quality but the quantity of architectual design. With these changes, sometimes in front, sometimes behind, great developments were taking place in the character and quantity of building materials—they had to! It was expand or go under, and while the situation may not be so acute today, owing to the vast legacy of shelter bequeathed by our late ancestors, the unsuitability of much of that inheritance requires a continuing flow of old and new materials, demanding in turn more service from architects if a functionally and æsthetically considered assembly of them is to leave an age of architecture more distinctive than that immediately behind. The excellence of a small quantity of architecture, as in Bath and many eighteenth century villages, and the tremendous quantity of building with little good architecture which followed, show clearly that good design, like many other good things, was not equal to the pace of the developing machine age. Natural materials worked by hand and placed by man-power could not have been expected to meet growing needs, while the creative ability of building designers, in any case, almost completely diverted to the more exciting fields of engineering invention, was totally inadequate to turn from interpreting the wishes and ideas of the client (often exceedingly well-informed) to the needs of the Company and Committee, little more aware of the problems they were trying to solve than their bewildered brethren for whom they were acting.

This general deficiency could perhaps not be better portrayed than by the growth of a substitute style—the Revivalist—which sketchily decked out new buildings in Gothic terracotta, Renaissance faience, or Wembley classic concrete, thus many of the crumbling and shoddy buildings of today may be taken as evidence of an alternative subject of 'Substitute design and its effect on materials'—but more of this later. The growing complexity of industry made it necessary to divert more and more labour from basic production to machine minding and secondary services. As the numbers of engine drivers or sanitary inspectors increased, so the proportion of quarrymen grew less and, more tragic still, the numbers of skilled craftsmen with natural design ability.



'New materials'

Characteristic of the growing strains produced at all levels of the building industry was the compulsory omission of ornament from the mass of industrial and domestic buildings. In spite of the efforts of Revivalist Architects who were producing more and more ornamental designs for a small minority, buildings, particularly in the early years, became plainer, arrises fewer, though over a century had to elapse —the last fifty years of which witnessed a deluge of machine-made ornament—before early forms were rediscovered and recognized, plain form being accepted for its own sake and shapes arising naturally from function being acclaimed with a fervour common to all succumbing to a new religion. This spread-over strain, affecting in turn brains, brawn, and materials, stretching buildings out until their once crinkled and moulded skins were almost drum smooth, is perhaps the chief emergent effect of the last century's social changes. It brought about a radical change in outlook on architectural design and, still being in existence, is influencing outlook, though not to the same degree, as will be shown later.

Changes in outlook were showing themselves in a number of directions soon after the first world war. One of the first and perhaps the most important was a conscious and often successful attempt to refine structural forms inspired by a greater knowledge of stress distribution. Examples are Maillart's bridges, the columns and staircase in Asplund's town hall extension at Gothenburg, the huge concrete posts of the Swiss students' hostel at the Cité Universitaire, and the exquisitely-shaped columns carrying the roof of the Swedish Pavilion at the New York World Fair in 1936. In all these examples the refinement and emphasis of form have a decorative value—they act as a

'The spray gun—new plastering techniques—softened angles a natural expression of sprayed plaster'

relief from uncompromisingly simple geometric shapes. The second indication was a return to natural materials. Certain of the favourite materials of the early 30's, particularly cement rendering and painted concrete, proved incapable of weathering successfully, and the more advanced exponents of the new movement began to design again in brick, timber and stone. These materials, besides improving with age, offered great opportunities for experiments in contrast of form and texture. Plate glass and rubble stone, with weatherboarding or reinforced concrete were a typical and highly successful combination, so much so that looking through the files of the ARCHITECTURAL FORUM one begins to wonder if American homes are built of anything else. The third indication of a change of viewpoint was the search for pure decoration. In England before the war this was only beginning: maps and murals had appeared here and there, and following more daring demonstrations of colour and texture had come striped and spotted wallpapers and corrugated sheeting, while the first few pot dogs were sitting self-consciously on the most advanced built-in fittings. Externally, sculpture, if detached from the building, and particularly if by Henry Moore, was quite permissible, and there were the famous caryatids at Highpoint Mark II.

Through these main movements other interesting themes could be discerned. The continuous nature of reinforced concrete and welded or rigid jointed steel frames enabled stresses to be resolved out of the ground. This found an appropriate expression in a much less tangible link with the earth, buildings gaining in dynamic expression by the mediums of inset lower storeys and stilts where they had expressed static qualities in previous periods by the spreading base and flying buttress, however elegantly the latter may have been conceived. With developments in lighter, stronger materials affording larger spans, designers were encouraged to abandon experiments in surface treatment for exercises in spatial arrangement—they were assisted in this by the glass manufacturer, and we may now look with some hope to the future development of transparent plastic products. Replacement of mass walling by frame led in the best examples to frank expression of thin wall backed by post, but many an enthusiast, ourselves included, who fell for the trick of abandoning the return on plan, discovered later that there was something after all in having a small amount of surface on which to receive curtains, heating pipes, facing slips, or other valid utilitarian effects. But while these, and the more liberal attitude to rediscovered early plain forms, are the better aspects of modern architectural development, much concrete had flowed through the mixers before we reached the immediate pre-war period, and while we take our breath from the viewpoint which we have now reached, we might as well take a look back at the mess which has been made, and left, on the way.

In spite of the ability to bring other natural materials won by other labour working in other parts of the world, it was not possible to bridge the widening gap left by the opposing trends of greater demand and diversion of labour, except by supplementing the flow of natural material with machine-made or synthetic. The way in which many synthetic materials are produced bears some affinity to the ways of nature, though the forces by which particles of stone and wood are bound together are much more effective than any man has yet been able to devise, though one hopes much may yet be done by the application of atomic energy.

Manufacturing processes which require feeding with chewed-up particles of natural materials to be joined together by chemical reactions such as the setting of cement or hardening of glues, cannot hope to produce as tough or workable a structure as that afforded by the materials they are intended to replace. But apart from the weaknesses inherent in the bulk production stage, further complications arise as the synthetic stuff is translated into usable elements of building. Sharp angles are undesirable, whether in cast or fired products, on account of the induced stresses which later, or rather sooner, cause untimely disintegration under the erosive action of an industrial atmosphere. When this unsuitability to be worked or made to an arris is allied to a scarcity of willing hands, it is not surprising that the sharp lines with which architects had been wont to decorate their drawing boards and camouflage indifferent proportions in their buildings should become somewhat softened or rubbed out completely. Unfortunately in many cases the rubbing out process did not take place on the drawing board, so that many a bright new arris on a cast concrete product or a little wavier, less bright, on fired products, was made to take the air, but if any student cares to look closely at the results of testing these buildings in the wind tunnels of our streets, he can see for himself that whatever firm tradition has been the spring board for development, there is a time and place for technique.

This disposition towards pathetic impermanence is perhaps the chief feature of synthetic materials, presenting the architect with his greatest problems, particularly in detail design. Many of the most promising modern works are failures today because their exciting form fails completely to redeem their ill-weathering surfaces. They have to take constant doses of paint to regain their youth, and, like drug addicts, they never quite come back, while grimmer still looms the day when they or society won't be able to afford the drugs. It is as though in the excitement of concocting new dishes with new ingredients, we forgot the toast. However clever our structural and æsthetic gambols may be, we cannot ignore the edges and abutments, the copings, sills and jambs which must be detailed with an eye to preservation if we hold any belief that our buildings are worth preserving. Loss of weathering qualities has regrettably been accompanied by lack of texture and good external quality, colour, particularly in sheeted materials, and architects are going to have to take this matter right to the manufacturers if developments in frame and dry technique are not to fade like non-tradition housing looks like fading. Judging by a pre-view of some of Turner's new literature it appears that they are anticipating some such move from the profession—it may be they want to prod us—but they are obviously aware of the need to produce reliable texture and colour if their asbestos products are to find a wider market. This is encouraging, particularly when remembered against the relatively successful efforts of certain cast concrete producers, notably roofing tile manufacturers.

With impermanence, as a balance of nature I suppose, we also get the most aggressive permanence in our main synthetics. Both in texture and colour the terracotta block, machine-made brick, and lately, the plastic sheet, display inflexible characteristics demanding the most discreet employment. Good designers need have no fear—the unmelting charm of the Russell Hotel or the stridency of the DAILY EXPRESS harangues is well matched by the urbane suavity of Gilbey's, even though the latter does need a wash over more than behind the ears. The trouble is that too many of these materials are coming to the architects. The architect should have gone to them while they were still in the melting pot; but I am anticipating.

It is impossible to make a review of materials and design without bringing in methods, and although the title of the paper makes no mention of methods, we don't propose to make any apology for introducing them. Those causes which were creating synthetic materials also forced the partial eclipse of the human hand. Concrete, mechanically mixed and vibrated, faience fired in moulds, plywood bent and joined in presses, and the revolving four-cutter figure, among many examples which we may see at Olympia tomorrow. Recently the spray gun, already established in place of the hand-wielded brush, has apparently made a successful landing in the plastering field, where the new materials and technique recently described in the R.I.B.A. JOURNAL should do much to restore the balance of capacity in that trade, and provide us with

the homogeneous surfaces most of us prefer. Even a surface examination of machine methods leads one inevitably from the arris. Plastic materials don't flow easily into square corners. There can be no undercutting in a casting without the creation of complicated moulds. An inspection of the tortured and sometimes even charred profile of a steel cutter on a moulding machine betrays the cost of the joinery manufacturers' assurance to the architect 'We can make anything'. As might be expected, softened angles are a natural expression of spray-applied plaster. But should the four-cutter machinist and the rest be forced to make 'anything' by a tradition that ignores technique? On the other hand, is it wise to over-ride tradition in the search for technique? As in most problems of this kind, the answer lies at varying distances between the two, dependent on the circumstances. My own experience in trying to evolve a satisfactory technique for using wallboards may help to illustrate the point. There have been many failures in methods of using wallboard which aim at producing the traditional homogeneous finish of plaster. My own are among them. Broken scrim tapes and canvas cover strips are symbolical of the broken hopes of designers, and, if they would be frank, the miserable thin effect of 'cover' strips harmonizes well with their private dissatisfaction.

Even worse than the surface failures of joints are the failures of joints at external and internal angles, again more often than not due to the designer following too slavishly the effects of plastering technique in the hope of producing a clean angle. Our dissatisfactions with the cracks, poor angles, and thin cover strip effects, are due mainly to allowing traditional considerations to stand in the way of establishing a new technique. I first realized this over ten years ago when wallboards were comparatively new, and plentiful, and, incidentally it should be confessed, when I was comparatively new to the practice of architecture. My first attempts to produce a better detail at external angles brought me to what I have since found to be a more logical expression of wallboard, at the same time as a more practical way of using it. All I did was to let one face pass the other instead of trying to make them meet in a neat angle like a plaster arris. I am surprised to see no mention of this detail in an otherwise helpful book which has just been published by the Wallboard Industry.

You will soon realize, however, as I did, that once the old form of joint is replaced by the new, all kinds of possibilities arise—details at the sides and fronts of pilasters—trim at door and window openings, and fascia with soffit junctions lend themselves to a treatment giving a more positive line while expressing clearly the nature and thickness of the material used. There are snags—the passing material should nearly always be a hard board, but combining hardboards with textured softboards is a valid design device—generally softboards for large surfaces and hardboards for thin margins, fascias and linings. It should be noted that degree of passing depends on position in relation to use—$\frac{1}{8}$ to $\frac{1}{4}$ in., for the hardest boards in exposed positions, and then with arrises well softened. The softer boards are better for surfaces because they are the thicker and therefore allow for the formation of a V-joint while leaving some straight surface for abutment. I have seen satisfactory V-joints even in thin wallboard, but thicker boards give the most successful results. Such a frank expression of the boundary between two pieces of material is really the only one worth consideration. Cover strips create two joints where one existed, while their meagre scale against the large scale of the sheets makes an unpleasant contrast far removed from the decorative effects of the genuine panel tradition they attempt to imitate. Where tradition does come into wallboard design is in the formation of a sound foundation—too many dry lining schemes display unsatisfactory characteristics of flimsiness and impermanence, due to their buckling across too widely spaced firrings. I have spent some time on this subject because wallboards are a valuable contribution to dry technique and factory production, and because the principles involved are general wherever a good way of using a new material is at stake.

Good and thoughtful detailing has always been necessary in architecture, but it is now even more vital that applications of today's materials to meeting today's needs for buildings should be accompanied by the closest attention to construction which will give good weathering with low upkeep costs. Not only must the architect detail well, but he must become much more familiar with the way in which his materials are made and assembled. Those synthetic materials which stay on the market because they are good will nearly always give better building performances if they are sympathetically used; that they can be made to contribute to æsthetics depends on the designer, and so far I see enough evidence to encourage cautious optimism.

When I began, you may remember I drew attention to the threatening atmosphere of this jungle we have been tentatively exploring, and during the periods I have briefly reviewed a storm has been gathering. From a few drops of special and then standard windows, the problems of the designer have been greatly amplified by an increasingly heavy shower of larger and larger assemblies—windows and doors with and without frames, wall and roof panels, whole plumbing units, while truly tropical dimensions have now been reached with showers of whole houses. From being the master who went to the quarry and forest to pick his material, the architect has become, or is in danger of becoming, nothing more than a clearing agent for 'ready mades' of all scales. There is a lesson in all this.

The architectural profession must face up to taking a much more active part in Industrial Design. As an alternative to public service I suggest a move from office to factory as in some of the more successful examples in the former field; it may be either part or whole time service. Already encouraging results have emerged from

'New forms—inset lower storey—glass façades'

this new ground for co-operation. To give an example perhaps the most notable is that of the EJMA range of windows, doors and fittings to designs produced by Frederick McManus. The pleasing proportion of the windows alone must make metal window manufacturers reconsider their norms and technique if they are to add a high æsthetic standard to whatever other claims they may make for their products. Indeed I consider it no exaggeration to say that the EJMA window designs are so good as almost to ensure pleasing results in the most casually, or should I say sub-consciously, local surveyor-designed houses. It is almost as though McManus had written the opening chapter of a new builders' handbook. The only criticism one may offer is that the widened norm—20 in. in the case of metal to 24 in. for EJMA is too much for the slender sections dictated by material shortages, but let it be noted that the answer lies in an increase in the sections and not a reduction in the norm. Æsthetics have been sacrificed for production and material considerations too many times in the past and if their status is to be restored this new, and I fear inevitable, torrent of ready-made assemblies must be controlled by the skilled designer—I know of none more qualified to undertake this responsibility than the well-trained architect. We must not be too modest.

Mr. Tom Mellor: The first part of this paper dealt with the effects of substitutes evolved to meet some real or imagined requirement of the designer, in other words, to help him. This second part is particularly concerned with compulsory substitutes, materials or expedients imposed on the designer because of shortages, and with the effects of these on the development of contemporary architecture. The effects of particular substitutes are not finally determined by their own characteristics, they have indirect effects on the designer's mind, and in the case of compulsory substitutes much depends on the quality of what is offered and on the margin within which the designer is free to work. Plywood, for instance, appeared as a voluntary substitute, and offered so many advantages and was so much in line with æsthetic theory and the general trend of design that it caused a change in technique —flush panels replaced the frame and panel. When special circumstances made plywood

'New methods'

hard to get there was a return to the superseded construction, the use of panels of plywood, hardboard, or asbestos became a compulsory substitute. Under certain circumstances this might lead to a rediscovery of the value of the panel to provide surface relief and decoration. But this secondary effect, the discovery of virtues in the compulsory material or technique, depends on the amount of margin the designer is allowed.

The availability of suitable veneers and contrasting timber for frames, moulds, or inlays may suggest all kinds of possibilities to the designer who would normally by training and experience use a flush panel, but if he is forced to adhere to a rigid economy formula to determine the size of his frame members and if these are to be of unseasoned timber straight from a machine with panels of cardboard or asbestos, he will probably return to his previous technique as soon as he has the chance. Because of this complexity of effect it would not help very much to try and compile a list of compulsory substitutes; apart from the sudden way in which such substitutes appear and disappear, to remind us of the complexity of our economic situation and the never-failing ingenuity of the Ministry of Works, such a list, even if complete with technical information as to characteristics and uses, would give very little information about effects on design. This is only shown by results, and in considering these we are immediately up against the difficulty of picking out something positive from the mixture of nostalgia, sales talk, disillusion, and somewhat earthy realism which make up the modern architectural scene.

However, looking back over the last ten years most people will agree that there is one important trend; a reaction against the simple solutions of the functionalists of the early 1930's, and bound up with this are feelings of doubt about synthetic or substitute materials as a class. To illustrate this I will read two quotations. The interesting thing about them is the change in our reactions to them over the last ten years or so. They are both descriptions of domestic interiors. This is the first: 'The room was spread with white carpets on which seemed laid brilliant garlands of flowers, ceiled with snowy mouldings of white grapes, beneath which glowed in rich contrast crimson couches and ottomans, while the ornaments on the pale parian mantelpiece were of ruby red Bohemian glass.' The second: 'The walls are finished in washable swanolin, the doors are "woco" flush oregon pine, the metal window sills are covered with cemented lino. The floor is covered with grey linoleum fixed with copal gum, and the furniture consists of standard built-in fittings designed by the architect, which can be arranged in 200 different combinations.' The first is Jane Eyre's description of Mr. Rochester's drawing-room, and the second describes a house in Brussels and is from F. R. S. Yorke's 'The Modern House.'

Most of us have lost a certain amount of our original enthusiasm for the type of architecture suggested by the second quotation, and we are perhaps more sympathetically inclined towards Mr. Rochester's ideas than we would have been fifteen years ago. It is the speed and direction of this movement with which I am concerned, and particularly the effect on this speed and direction of the compulsory substitutes and shortages with which we are struggling.

As suggested in the first part of this lecture, this movement—the humanizing of functionalism—showed itself before the war in three main ways—the refining of structural form and its use as decoration; the revival of an interest in natural materials; and the return of surface pattern and decoration. It was particularly unfortunate that war came when we were beginning to realize the value and necessity of this development. Overnight it became vital to be as austere and functional (in the most material sense) as we knew how, and the most artistic neo-Georgian exponent abandoned his wrought iron and cream painted sashes, and met the most advanced manipulator of the free plan on very common ground—the air raid shelter. While it seemed salutory to some enthusiasts that everyone should become familiar willy-nilly with the use of flat roofs and reinforced concrete, even they began to tire of the effect of an enforced repetition of basic functionalism. Like the sorcerer's apprentice in the fairy tale, or the liberal-minded voter for the present Government, they began to realize that they'd started something, and like the apprentice's broom, it seemed quite likely to sweep them out of existence along with the stylistic architecture they had despised.

One of the first effects of austerity or the necessity for substitutes was to limit experiments in form. The refinement of say a reinforced concrete frame for æsthetic reasons became impossible, highly finished shuttering as well as skilled labour to erect it were not available. Frames in themselves were extravagant of steel and labour, and the cantilever was as impossible as the pediment. Our buildings gradually developed into two groups, the single storey hut type made of anything from 14 in. brick to compressed paper, with a flat concrete felted or pitched asbestos roof, and the factory with steel frame, brick cladding up to about 10 ft. and some form of sheeting for upper walls and roof. By making a certain amount of play with the very attractive range of colours which became available ostensibly for camouflage purposes, it was possible to learn something about the use of colours in landscape, and the Ministry of Works standard hostels gave their designers quite a lot of opportunity to experiment with the big-scale layout of standard units, an opportunity which some of them took, and some of them did not. As an opportunity for big-scale experiment with simple forms and colours the hostel programme was of great importance —if results could have been published and analysed they would certainly have been impressive, and even as it is the results are likely to affect the appearance and plan of more than one of the new towns. In detail design, however, it is certain that the effects of wartime limitations were bad both for architects and craftsmen. Detailing became much more sketchy and clumsy, and amongst students who trained under these conditions designs were and still are, dull and lacking in enthusiasm or imagination. All this is still very much with us. The change-over from war to peace is prickly and long drawn out, and there is a pathetic affinity between the precision engineering firm turning out toy howitzers for the five-year-old weighing about 5 lb., and the post-war School of Architecture student brought up on gun posts and quetta bond trying to design a ballroom for the British Embassy in Athens.

The second line of development, the use of natural materials either for æsthetic reasons, their value in providing texture, surface patterns and variety, or for practical reasons, because of their weathering or hard-wearing qualities, has also been strongly influenced by compulsory substitutes. During the war and since, economy and import restrictions have greatly limited the range of materials available, particularly for decorative purposes. Most designers would agree that natural materials are usually more attractive for facing purposes than synthetic or substitute materials, and modern architecture being concerned greatly with planes or panels, is dependent on good facings and finishes. Again, natural materials have a characteristic hardness and structure which limits their application and produces characteristic forms—the hard angles of a hand-made hardwood chair indicate the methods of turning, jointing and glueing as clearly as the Finmar designs suggest the moulding and pressing of laminated wood. For some reason, these positive angular forms are attractive to us: we have reacted against the rounded forms characteristic of moulding and pressing, and the current tendency in say, furniture design, is toward a light and simple elegance, neither streamlined nor spiky, decorated with the natural patterning of grain, or using the contrasting colours of light and dark woods. This being so, shortages are bound to have a depressing effect, and we only need to compare our furniture at 'Britain Can Make It' with contemporary Swedish, Danish or Swiss designs, to see how we have lost ground. The chairs made from inflated rubber lifebelts or the post-war modifications of seats used

in aeroplanes or submarines have, apart from novelty, little to recommend them. The same can be said of plastic bowls and ornaments. These are in nearly all cases inferior in design to their glass or pottery equivalents. Faced with these difficulties we can only try to make our limited supply of natural material—hardwood, stone, slate, or marble—go as far as possible.

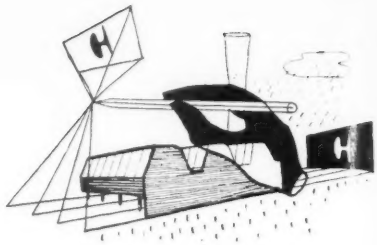
New plastic techniques and new methods of reproducing veneers seem to offer possibilities in this direction, but surface feel and subtleties of texture are often as important as colour and pattern, and more difficult to reproduce. Clearly, more thought and experiments in this direction are required. It is an old story that we should make the most of the limitations of our materials, and design for them, but we have yet to see a really first-class example of synthetic panel facing—good enough to compare with really good plaster work, well executed natural wood panelling, or good tiling or stone or marble facing. Cover strips nearly always look thin, and are hard to deal with at ceilings, skirtings and angles. Again, the sheet sizes are either too large to fit in neatly round fittings and openings, like tiles, or too small to cover whole wall surfaces. Cork tile and the various composition floorings supplied in tiles or units up to 18 in. square illustrate what is required. They have many advantages over larger sheets or the in situ poured composition or mastic asphalt type of floor. Externally we have almost lost the best of all facing materials, natural stone, and on the other hand there is a revival of interest in good brickwork, and endless opportunity here for experiment and improvement, with a native material of first-rate weathering qualities and with great variety of colour and texture.

The continued shortage of glass provides a definite setback to modern architectural development; large sheets of plate glass are often necessary to create the free spatial relationships which are one of the most interesting features of contemporary design, and these are increasingly hard to obtain; even more difficult are the more pleasing varieties of wired and obscured glass, and in this case no practical substitute is yet available. The development of decoration and surface pattern—the third movement from Basic Functionalism—has continued consistently, war or no war, shortages or no shortages.

It is likely that enforced austerity and substitution have accelerated the designer's desire for relief and texture and variety of form, and the wartime exhibitions culminating in 'Britain Can Make It' have provided considerable material for experiment. Perhaps shortages of material and craftsmen have forced us to rely a little too much on the found object as a motif. Whatever the reason, the furnished rooms in 'Britain Can Make It' (which we can reasonably take as a typical example) show clearly the way we are going. Though some of the furniture reflects perhaps a sensibility blunted by five years of detailing aeroplane parts, we are surely well on the way to a Romantic revival. Cottage wall papers, familiar to our grandparents but rediscovered from Sweden, form a telling background to whole packs of china dogs and Graham Sutherland framed in gilt. The rustic fireplace, the rocking chair, and the surrealist use of rockery and ruins, underline the picture. If we want further evidence, we need only look at the pages of the ARCHITECTURAL REVIEW or the paintings of our contemporary school of topographical artists. Again, in the field of urban planning we have the Sharawag using the functionalist beehive façade as a telling background for the carefully preserved Victorian pub. It is interesting that the pub or its equivalent always appear in the foreground of illustrations of this type of development.

We are sometimes told by the more serious students of architectural theory that sociology is to follow functionalism as the guiding spirit of architectural design, but if this is so, its early manifestations are certainly more escapist and more entertaining than one would have thought. It seems more likely that we are looking for security and humanity in an austere and unkind world. After the last war we looked to the eighteenth century and produced a Georgian revival. It would be a strange but not impossible thing if a nineteenth century Romantic revival were to clothe Stevenage in terracotta or embellish our prefabs. with aluminium crockets. However we feel about such a possibility, there are other positive and less controversial developments which contribute to the small note of hope you were promised. The first of these is that during the last few years there has been a much more general acceptance of the shapes, colours, and patterns of modern architecture. While this is not a direct architectural advance, it makes it easier obviously for architects to realize their designs. This is particularly true now that our clients have become committees. We have been frequently surprised and impressed when discussing housing schemes with local councils by the advanced views of many of the council members, but whether this is due to their becoming converted or resigned, we do not know. No doubt part of the credit goes to exhibition organizers, but an equally important influence has been the shake-up in the public mind, and perception, caused by the enforced functionalism and austerity of war. Again, shortages and ministerial regulations are sharp if doubled-edged weapons, and have been used by architects to get their own way.

In material development I personally feel that most of the improvements are of technical rather than of æsthetic value, though obviously the two points of view are interdependent. For instance, an insulating material may be entirely unsuitable for external or internal facing, but makes an admirable insulating barrier when sandwiched between other materials. Its direct æsthetic importance is small, but if it makes larger glazed areas or more open planning practical in our climate, its æsthetic importance, if indirect, is clearly considerable. One improvement of this kind which is of some importance is the use of insulated



'The architect in the factory'

solid concrete ground floors in small houses. A local authority housing scheme we designed with this type of floor is now partly tenanted, and the tenants are unanimous in saying that the houses are warmer than any others they have lived in, and this in spite of glass areas greatly in excess of standard pre-war practice for this type of house, areas which were questioned by the Council and only allowed experimentally on the first few houses. With hollow timber floors it is certain that the houses would have been much colder, and one complaint of this would certainly have made the Council insist on modifications which would have affected the whole character of the scheme. The timber shortage made this type of floor almost compulsory, and also provided the designer with a perfect excuse for using a flat or flat-pitched roof, if he thought fit.

Advances in roof insulation and finishes have assisted in making this practicable for housing, and we have used natural grit finish on felt with quite good results, and light-gauge copper or zinc are possible alternatives with woodwool or fibreboard insulation. It is possible to achieve a high insulation value with a flat-pitched roof with a saving in cost of perhaps 10 per cent over the cost of the same degree of insulation with a 30 degree pitch, and of course this saving can be used to provide increased amenities such as improved fittings or finishes. There have also been improvements in the design of asbestos sheeting, notably the introduction of sheets which can be placed together to form a cellular slab with two solid faces capable of spanning 8 ft. with normal roof loading or of forming a stable and durable wall or partition, and recent developments in the technique of spraying on finishes are likely to produce interesting design developments, probably in the direction of softening and rounding off, but also perhaps towards new and attractive variations of texture. The effect of many of these developments has been to make certain design features typical of the contemporary style easier to achieve and therefore more likely to spread over the limited field of building work which is going ahead. While this may be generally desirable, it should not be regarded as an adequate substitute for real freedom to make æsthetic experiments. A Penguin edition of Shakespeare has little effect on the development of English literature.

To sum up, we can look back over the architectural developments of the last forty

years, and trace clearly the emergence and development of a genuine style expressive of both new materials and new ideas. As ideas have changed, the style has developed and advanced, the cubist and machine-inspired period of pure geometry is passing, and a curious but attractive compromise is taking its place. The special freedom and basic simplicity of the earlier period is retained and embellished with subtle contrasts of shapes and textures and patterns. Surrealism has taught us to revalue our recent past as a stimulating contrast to an austere present. We may still take a poor view of the bones in Mr. Goldfinger's parlour, but we are taking quite an interest in Staffordshire figures, and any day now will bring the chandelier down from the attic.

The early functionalists found their materials and technique ready to hand. Science and the machine had provided both the philosophy and the means towards its realization, but the new Romanticism finds its raw materials harder to come by, the more raw and romantic, the harder to find. It is as if we had rediscovered a taste for eggs and butter and meat and fruit in a time of stringent rationing, and are offered as substitutes cod liver oil capsules and aspirin tablets. Perhaps something could be made of unpalatable material if we had plenty of time, but unfortunately developments generally have been towards a spread-over of invention and original development in design, and it is debatable how far this attenuation can go before we lose the intensity of creative impulse which is essential to good architecture. It seems likely that wartime building followed by a concentration on housing and factory building has intensified this spread-over. A porch here, a staircase there, may show signs of creative thought, but there is much repetition of stale clichés and rows of the same dull windows multiply under the same dull copings. It used to be a general complaint that architects were not employed on a sufficiently wide range of buildings, or given sufficient scope to create complete projects, but when we look at some of the published town and city plans, or some of our recent housing, we must, if we are honest, feel a little dubious about our capacity to cope with so much, so often. The thoughtfulness and artistic perception necessary to create a very lovely country house of four or five bedrooms may not go very far towards producing an equally attractive New Town, particularly if perception is to be subordinated to economy, sociology and the balance of our export trade.

Baines has hinted at the need for the entry of the creative designer into the manufacturing side of the building industry, and this may help to improve the situation, which definitely exists, again for economic reasons, in a time of architectural depression. Another solution would of course be an increase in the general valuation of good design. The spread-over I have described is a direct result of the increase in committee architecture mentioned earlier by Baines. Whatever the advantages or disadvantages of this development, it should be borne in mind that many of the new materials and techniques provide for a general application of some principle or standard first worked out as a special and private refinement. The kitchen-bathroom unit of the temporary prefab. is a case in point. The source of inspiration for such developments, the individual experiment with a margin for waste or luxury, has largely dried up. An interesting solution might be a counterpart of the Building Research Station to carry out research in pure æsthetics with a nice substantial grant. The ARCHITECTURAL REVIEW complained recently of an acute shortage of follies—here, perhaps, is the answer.

DISCUSSION

Mr. A. M. Chitty [*F*] said that he did not think there was such a thing as a substitute material; there was only an act of substitution. It seemed to him that every available material had been used sometimes as a substitute for something else; for instance, iron had been used as a substitute for timber in the roofs of stations or large buildings in the last century, perhaps satisfactorily. Equally, a material could be used in a substitute way unpractically and unbeautifully. The term 'substitute material' had not been defined sufficiently. There was only a subjective act of substituting, which could be done well or ill. Going on from that, one must wonder about the word 'synthetic'. He was only an architect, not a chemist, and he sadly felt the need of a chemical training in these days. It seemed to him there were great opportunities of having something more new, more different than the previous natural materials.

As to the detail points made, Mr. Chitty said he had been very surprised at some of them. The question of arris—it had struck him that in any moulded or stamped product the essence of the thing was that the top and the bottom of the arris or mould were as perfect as they could have—more perfect than anything from a natural building material. Those other arrises where the product had to be drawn from a mould must be of different kind and design. He had found, for example, the sharp edge of a moulded bakelite object an extremely fine arris. As to the question of impermanence, he wondered whether that was valid. Had they sufficient information that synthetic materials were impermanent?

Mr. H. N. Ashman said that to his mind the word 'substitute' conveyed rather an unwilling acceptance and possibly a yearning still for something they had not got, whereas if they were to get the best out of a new material and technique, surely they had to accept it first in the spirit at least of development and progress and possibly evolution. He felt they could not lay too great an emphasis on the need for design in these new products.

Mr. R. A. F. Riding [*A*] said that his first contact with synthetic materials had been wonder at the production of 3-ply board, and as an example of suitability of material he could not help feeling that 3-ply board, for instance, was far superior to a jointed tongued and grooved board as a drawer, for example. Natural materials were running short in this world, and they must find substitute materials. It was a matter of the redistribution of the atom.

Mr. M. Hartland Thomas [*F*] said they all knew what a substitute material was, and they all knew they were usually bad. A substitute material was something you would rather not use if you had the thing you wanted to specify. The first thing that occurred to him was the window glass substitutes they had used in the blitz. For the most part they would have preferred to have glass.

Mr. G. Grenfell Baines said he still must be at difference with Mr. Chitty about the sharpness of corners. Bakelite was nothing like as significant as concrete and wallboard. While the edges of bakelite ash trays might be crisp, he did not think the outside corners were anything like those produced with a 2H pencil on the working drawings. On the question of impermanence: the impermanence to which he had referred was not a material impermanence, but of good appearance. These bright new clean buildings, which photographed so well in their first year, especially with a few trees about, very soon began to look shoddy and unsatisfactory, and it was that impermanence of appearance to which he had referred. He was inclined to agree that a certain amount of impermanence in buildings was a good thing. Much of the tragedy of our present heritage was its permanence. He would be willing indeed to sacrifice a material permanence on that account, but it was the way these things went off in about twelve months, due generally to careless detailing and lack of appreciation of the precautions which must be taken to ensure that they withstood the erosive effects of Mother Nature, which he had been criticizing. It was without doubt up to the architect to get into the factory, not to stand by and receive these things, but to try and make the best of them.

Mr. Tom Mellor said that while there might be some queries about the use of the word 'substitute' he did not think anyone could deny that since the beginning of the war they had had to cope with substitute materials and techniques, whatever they meant by substitute, and they had had a very considerable effect on ideas and design in both direct and indirect ways. With regard to Mr. Ashman's remarks, that we should accept the use of substitutes, he thought they had rather rubbed it in that they did accept them. The fact that they had reacted against them was another matter, but perhaps they would now have compulsorily to accept them again.

As to the speaker who had said it was really a question of redistribution of the atom, he was afraid he had got something there.

The drawings illustrating this article are by Mr. John D. Cordwell [*A*].

Practice Notes

Edited by Charles Woodward [*A*]

TOWN AND COUNTRY PLANNING ACT, 1947. As has been stated it is expected that the 'appointed day' for the coming into operation of this Act will be 1 April 1948. Some of the sections came into force on 6 August 1947, the date of the Royal Assent, and these have been previously noted.

The Interim Development Act, 1943, will be repealed on the 'appointed day', but until then the power to revoke or modify a permission under Section 4 of that Act can be exercised by the planning authority.

This Act will affect existing Planning Schemes, and permissions under interim development and the position on the 'appointed day' appears to be as follows.

The 1932 Act will be repealed and operative schemes under that Act will lapse. The planning authority will remain, and provisions in the scheme for the preservation of trees, control of advertisements, street works and suspension of enactments will still be in operation until determined by an Order made by the Minister. (10th Schedule.) Buildings in course of erection or alteration but not completed on the 'appointed day' will be deemed to have been permitted under this Act if they conform to a scheme or a permission under a scheme, and if there is a required permission under the Restriction of Ribbon Development Act, 1935. No development charge will be payable in respect of the completion. (Section 78.) Similarly, buildings in course of erection or alteration in accordance with an interim development permission under the 1932 Act will be deemed to have been permitted, provided there is a required permission under the Ribbon Development Act. No development charge will be payable in respect of the completion.

As Operative Schemes under the 1932 Act and interim development permissions granted before 22 July 1943 lapse on the 'appointed day', an application to complete or carry out any buildings begun or contracted for before that day must be made within six months after the 'appointed day'. If permission is refused or granted subject to conditions, a claim may be made for compensation in respect of abortive work or an abandoned contract. The claim includes any expenditure in the preparation of plans in connection with the buildings. (Section 79.) If permission is given to complete the development so begun or contracted for, then, as provided for in Section 78, no development charge is payable in respect of the completion.

If an interim development permission has been granted under the 1943 Act and is in force on the 'appointed day' together with any necessary permission under the Ribbon Development Act, permission will be deemed to have been granted under this Act for so much of the development as has not been carried out before the 'appointed day', and development charge will be payable. (Section 77.) If building work has begun and has not been completed before the 'appointed day' then permission is deemed to have been granted under this Act for the completion of the work and no development charge will be payable in respect of the completion. (Section 78.) If under Section 21 the interim development permission is revoked or modified, and this must be done before the buildings have been completed, then under Section 22 abortive expenditure, loss or damage may be claimed. The expenditure includes the preparation of plans in connection with the buildings. The revocation or modification cannot affect so much of the buildings as have previously been carried out.

Under Section 26 the planning authority can require buildings to be altered or removed and a claim for compensation may be made under Section 27. Presumably this power would be exercised where the planning authority has not acted under Section 21.

Where buildings were begun or contracted for at a time when no planning control was in operation in the area, an application must be made to complete or carry out any buildings begun or contracted for before the 'appointed day'. The application must be made within six months after the 'appointed day', and if refused or granted subject to conditions, a claim may be made for compensation in respect of abortive work or an abandoned contract. The claim includes any expenditure in the preparation of plans in connection with the buildings. (Section 79.)

Under Section 80 before land can be regarded as ripe for development on the 'appointed day' the Minister has to certify to that effect. He must be satisfied that planning permission has been granted, that the development value is due to the proposed development and that between 7 January 1937 and 7 January 1947 either a building contract had been entered into and was still in force or a bye-law submission or a building application had been made during that period. If the Minister so certifies and the land is acquired compulsorily after the certificate is given, the price includes the development value due to the development. An application for a certificate must be made within one year after the 'appointed day' and if granted and the development is proceeded with, no development charge is payable. This provision applies to the erection, extension or alteration of buildings. The planning permission may be revoked, in which case no certificate will be issued.

For converted value payments under the War Damage Act where the property is acquired compulsorily, the authority will pay the full existing use value as if the damage had been made good, the owner thus receiving a single payment covering acquisition and war damage. The acquiring authority will receive the converted value payment. (Section 53.) As the owner in this case will lose any development value he will be able to make a claim for a special payment. (Section 59.)

Where a refusal to continue development has been given a claim may arise under Part 6 of the Act. It is the Minister who refuses permission or grants it with conditions either on appeal or on a reference of the application to him. The reference to 22 July 1943 is to the date when the Town and Country Planning (Interim Development) Act, 1943, came into force. Interim development permissions before that date were given under Section 10 of the 1932 Act.

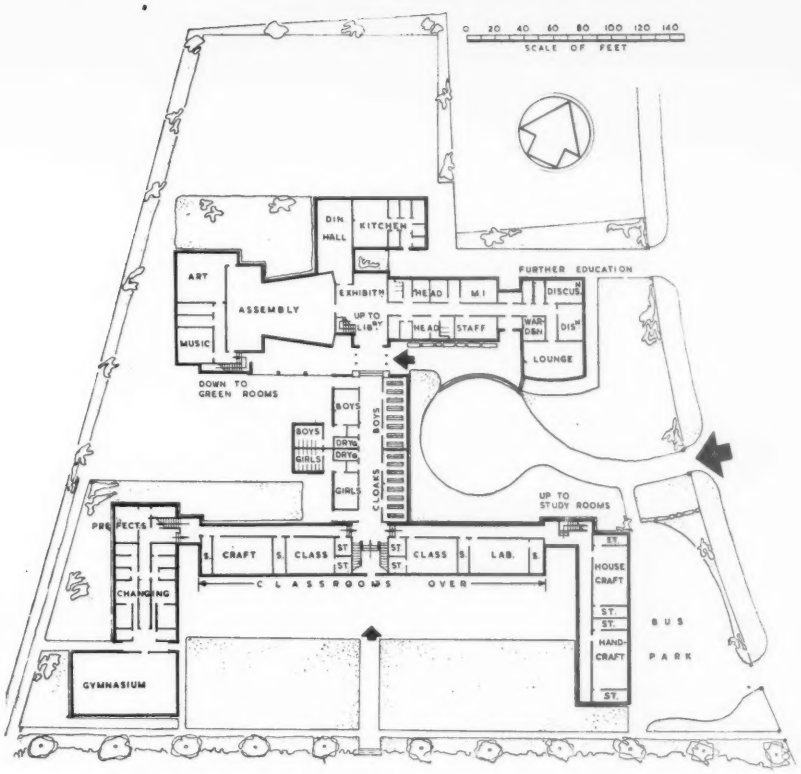
The expression 'building contract' in Section 80 means a contract made between a person for the time being interested in the land and any other person, under which that other person undertakes to carry out the whole or substantially the whole of the building operations to be carried out in the course of the development. The expression 'bye-law submission' in Section 80 means submission of plans to the proper authority of the buildings proposed to be erected, extended or altered in order to comply with bye-law requirements or other enactment requiring plans to be submitted. The expression 'building application' in Section 80 means an application under the Town and Country Planning Acts, 1932 to 1943, or under bye-laws or other enactment requiring consent to be obtained for the construction, extension or alteration of buildings.

MINISTRY OF HEALTH CIRCULARS. Circular 179/47 dated 22 December 1947 addressed to Housing Authorities in England refers to the Iron and Steel Distribution Scheme in connection with local authority housing, and to the arrangements that will operate as from 1 January 1948 for authorizing the use of steel (including steel sheets) and cast iron. The Circular is too lengthy to quote in full, but provides that M. Forms issued for the second quarter of 1948 for steel and cast iron and for later delivery periods will lapse on 31 March 1948. A revised Form I.S. will be used to control deliveries of these materials from the second quarter of 1948 and onwards. M. Forms for the second quarter will not be valid, and will have to be re-authorized on the new Form I.S. All M. Forms issued for the first quarter of 1948 will be cancelled in relation to the whole or any part of the order which has not been delivered by 31 March 1948. Steel sheets will remain covered by the existing arrangements, and the M. Form will continue to be used.

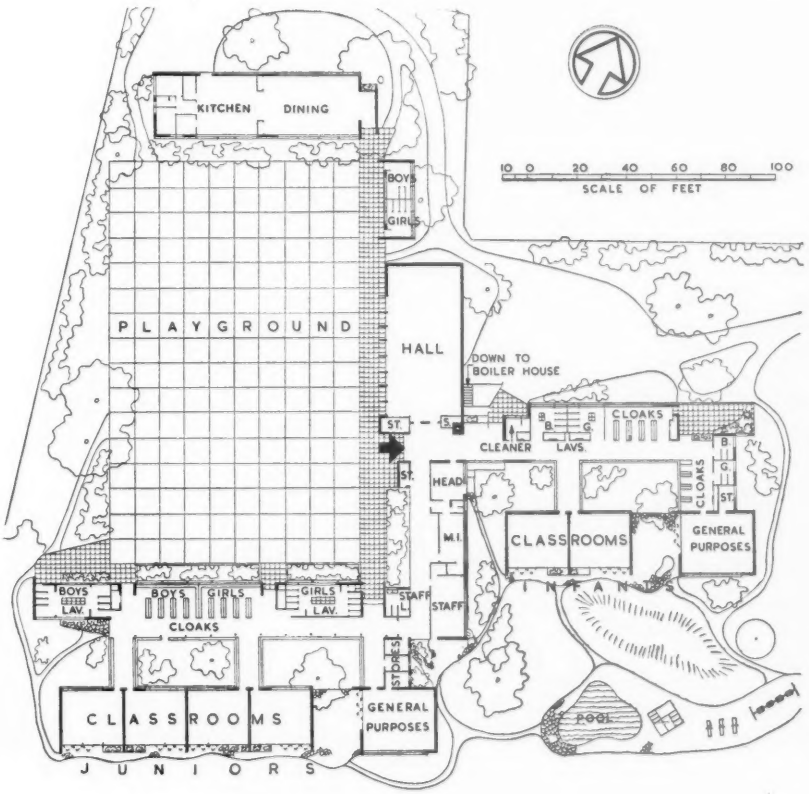
WAGES OF WOMEN IN THE BUILDING INDUSTRY. The National Joint Council for the Building Industry have decided that as from the beginning of pay week next following 7 December 1947, the rate for women engaged on craft processes will be 1*s.* 11*d.* per hour, and for those carrying out work other than craft processes the new rate will be 1*s.* 7*d.* per hour.

Some Designs from the Schools Exhibition

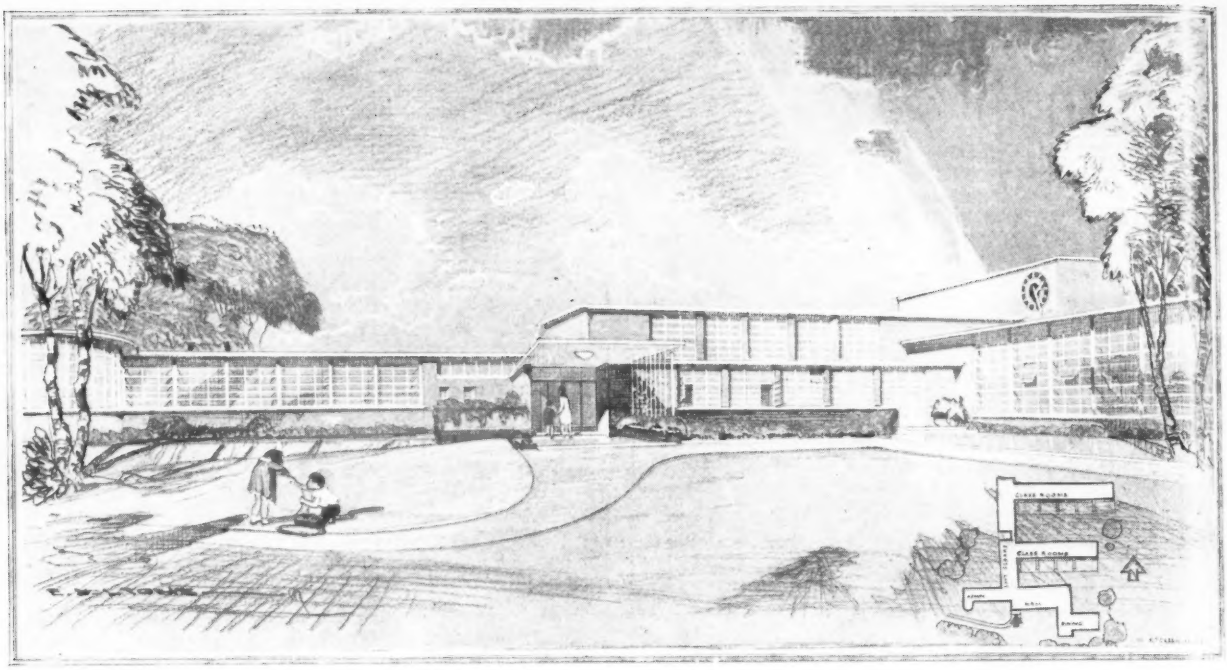
Part II

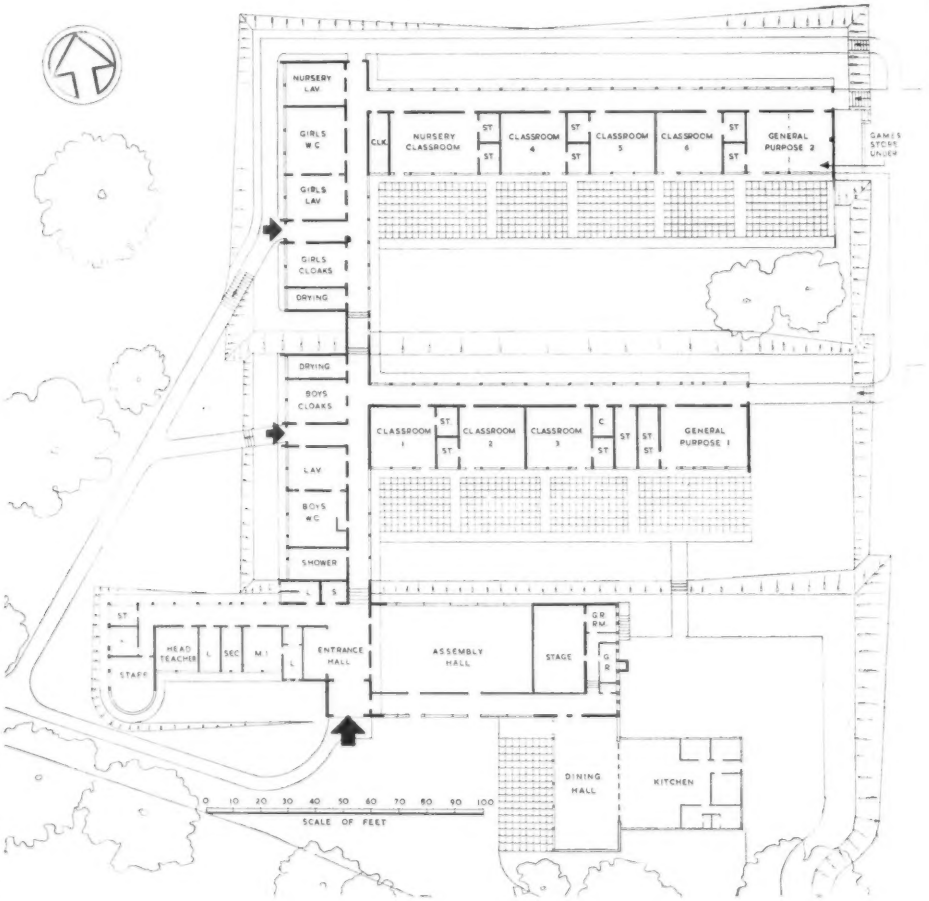


Essex County Council. H. Conolly [*F*] County Architect. Secondary Modern (mixed) school for 300 at Grange Hill, Chigwell. Site triangular with building sited on higher north end overlooking playing fields. Provision for further education in a separate wing; gymnasium and changing rooms near playing fields. Construction: prefabricated standardized steel frames: walls of brickwork: roofs and floors of precast concrete units

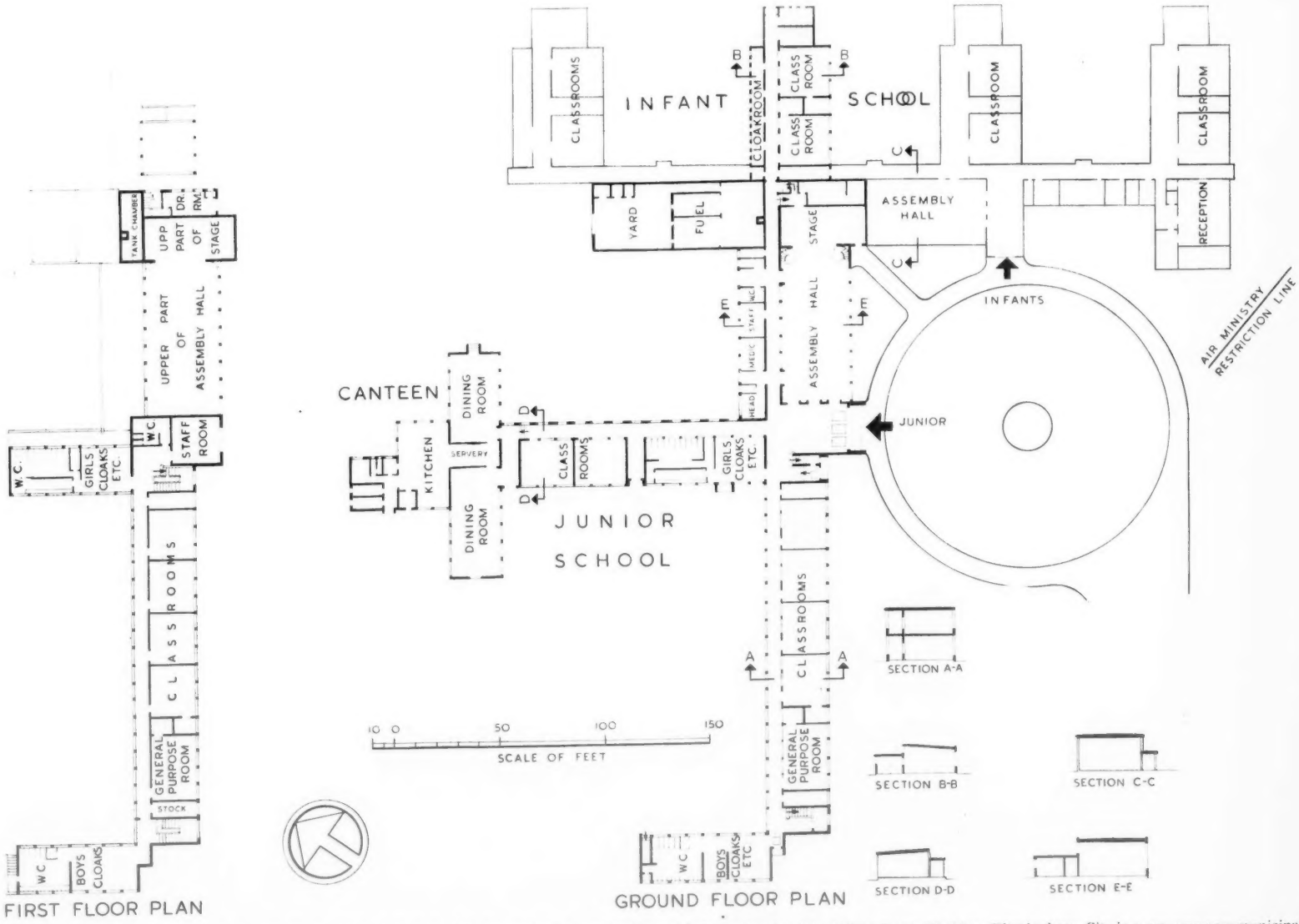


North Riding of Yorkshire. Denis Clarke Hal [*F*] Junior and Infant School, Ormesby, Yorks. One form entry for 120 infants and 200 juniors. Level site of 7¼ acres. Construction mostly standardized with semi-rigid steel trusses; walls colour-washed bricks. Special care taken on noise insulation, classrooms being protected by planning against distraction

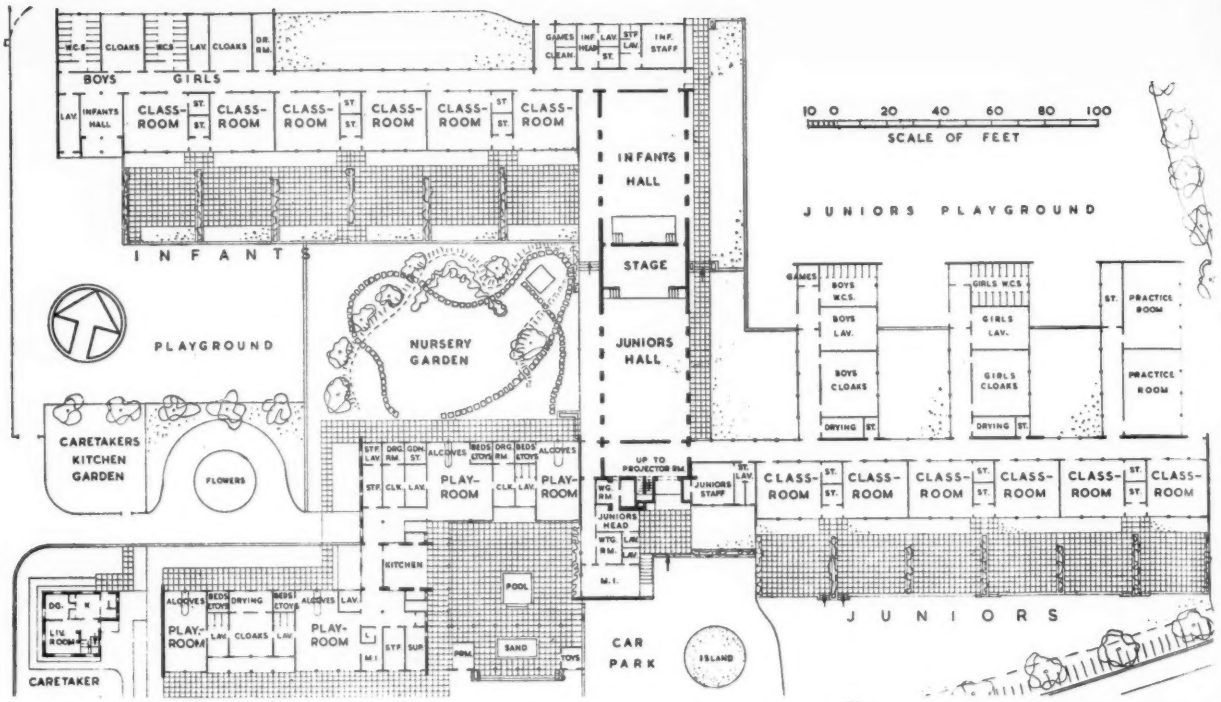


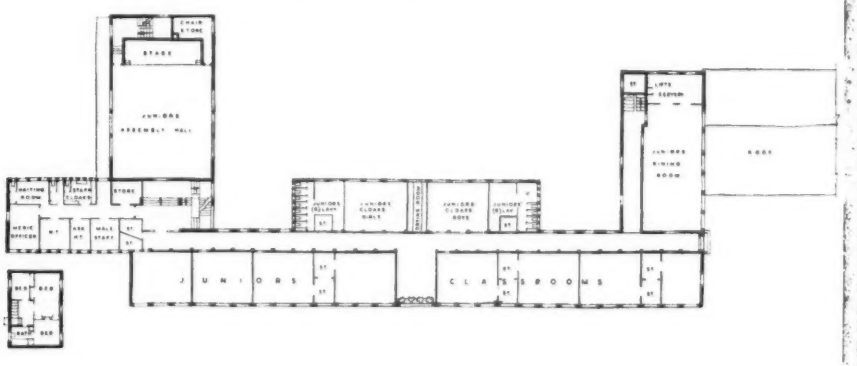


Kent County Council. Sidney Loweth, F.S.A. [*F*], County Architect; R. T. Green [*F*], architect in charge of school buildings and J. C. Loyd [*A*], assistant architect. County Primary School at Wildernesse, Sevenoaks, for 190 juniors and infants plus a nursery class. The building will have to be used temporarily as part of the present modern school for boys, involving some plan rearrangement. Construction: steel frame with brick infilling: roofs of metal units, insulating board and built-up felt finished with ragstone chippings



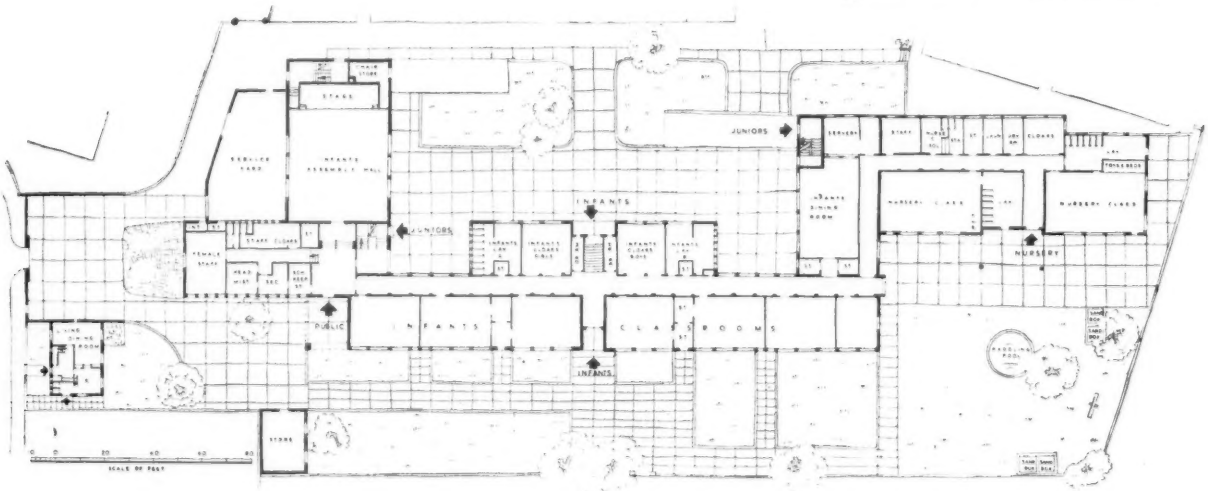
Birmingham Education Committee. W. T. Benslyn, A.R.C.A. [*F*]. Three form entry junior and infant school at Mapledene Road, Sheldon, Birmingham. Site in a pre-war non-municipal housing estate. Site 10 acres but restricted by Air Ministry zoning; balance as playing fields. Assembly hall in each department; one kitchen serves two dining rooms. Construction: light steel frame at 8 ft. 3 in. centres with brick and stone infilling: upper storey has a 'floating' floor to insulate against impact noises

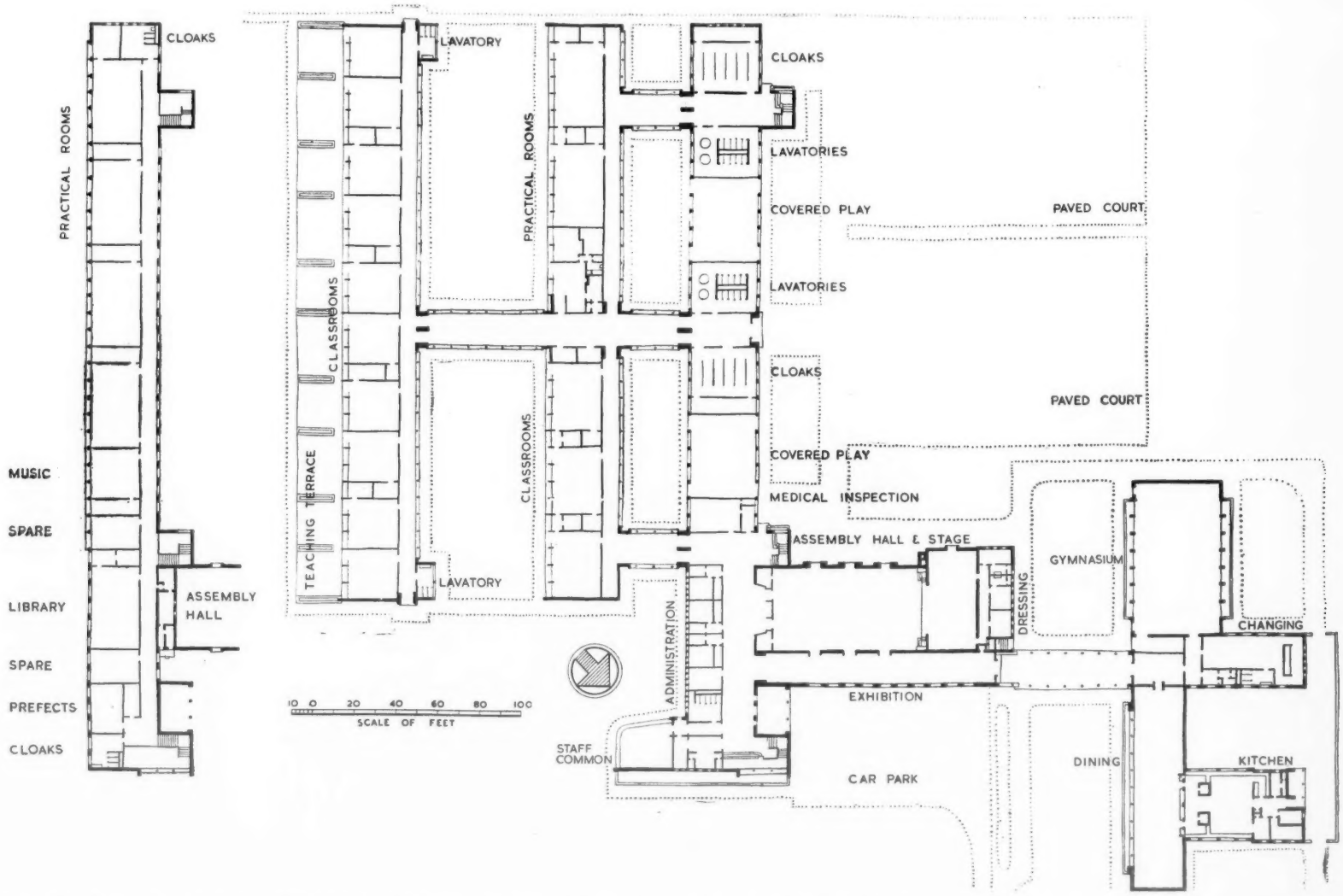




City of Coventry. D. E. E. Gibson, M.A. [*A*], City Architect. Nursery and Primary mixed school at Canley for 80 nursery, 240 infants and 320 juniors. Site of 7 acres in Corporation housing estates. Dining facilities are provided in an existing building. Construction: light cold-rolled, box-section steel frame at 8 ft. 3 in. centres. Walls and partitions of hollow block

London County Council. R. H. Matthew [*A*], Architect to the Council. Typical Primary School for 320 juniors (mixed), 240 infants and a nursery class of 80 on an L.C.C. housing estate. The site is 2.7 acres and falls 18 ft. from south to north. Playgrounds on the north side. Certain items of non-teaching accommodation are in a lower ground floor (not shown) including the kitchen which serves upper floor by lifts





Lancashire County Council. G. Noel Hill, M.T.P.I. [*F*], County Architect. Secondary modern school for girls at Litherland, Lancs. Three form entry. Provides school accommodation for post-war housing in a light industrial and agricultural residential neighbourhood. Level site of 18 acres. Plan form is conditioned by necessity for construction in instalments. Construction: standardized steel frame with brick facing inner skin of thermal insulating material; hall and gym have load-bearing walls; single storey classroom units are flat roofed, one with Ruberoid steel decking, the other with aluminium decking both insulated and surfaced with bituminous felt; 2-storey blocks are pitched roofed. Contract on fixed fee system. Estimated cost £120,000

The Building Exhibition Olympia, 1947. Part II

Roof Construction

It has long been recognized that the 'text-book' traditional roof of 2 in. by 4 in. rafters at 14 in. centres and 6 ft. between purlins is wasteful of timber. During the inter-war period some speculative builders found they could economize on this by such devices as using 2 in. by 3 in. or increasing spacings and spans. Today the high price and rationing of timber have brought about close studies of its use with the aim of making every piece do its full job. One result of these studies has been the designing of a new form of pitched roof construction by the Timber Development Association, or rather by Mr. P. O. Reece, Constructional Research Director of the T.D.A. A model of this roof was on view at the Building Exhibition, and a full-scale section was tested to failure at the Forest Products Research Laboratory during the run of the exhibition. Details are reproduced on this page.

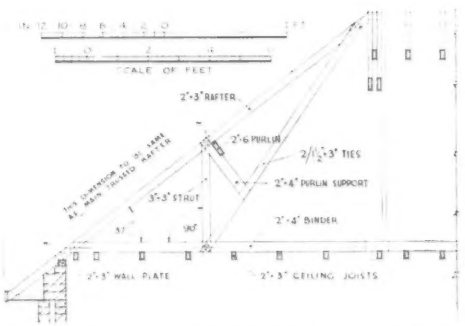
This design recognizes another trend besides scarcity and high price of the material, namely the vogue for gabled roofs which has resulted in a heavy demand for rafters from 16 ft. to 18 ft. long and something like a surplus of shorter pieces. Trees do not grow to standard lengths—a fact which did not matter when a high proportion of roofs were hipped because the shorter pieces were automatically used up on such rafters, etc. This new T.D.A. roof construction was designed not only to economize in material but also to use short pieces; indeed up to 75 per cent of the rafters in it can if necessary be in lengths of 6 ft. to 10 ft. Every fourth or fifth pair of rafters is framed and braced to a ceiling joist with 'Bulldog' connectors in the form of a truss. These trusses carry the purlins on which the rafters can be lapped; they also carry binders on which ceiling joists can be lapped. (See detail on the opposite page.) The roof does not rely on support from internal partitions, which can therefore be planned freely. Also the trusses can be prefabricated in two halves.

The test at the Forest Products Research Laboratory was designed by Mr. J. Latham, one of the officers of the laboratory, and carried out by them for the T.D.A. It was witnessed by a party of architects and journalists, including the representative of the JOURNAL. Distributed vertical loading was applied by means of screw jacks pulling downwards on both rafters and ceiling joists. While such conditions could be achieved in practice by heavy wind and snow loads on the rafters, they seemed to us to be rather severe on the ceiling joists. Anyway failure occurred at a joint with a ceiling joist at 2½ times the total design load, the equivalent of full dead load plus nearly four times the design superimposed load. It is understood that the experimental work in this research project will be completed about the end of January, and that the T.D.A. will publish the results in the form of design sheets early in the year.

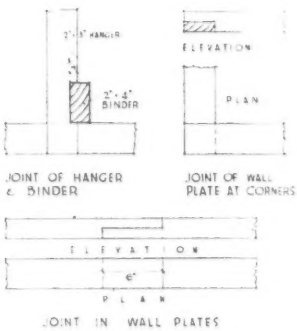
Fireplaces

Comfortable living conditions are so much in all minds these days that architects are having to make complete new studies of flues and their adjuncts, from bottom to top. Starting at the bottom, there were several types of solid fuel heating stoves on view at the exhibition of the kinds which are now fairly familiar, but at least two caught the eye on account of their novelty. One was a 'compactum' stove displayed by the Riva Fireplace Company Ltd. This was an ordinary fireplace interior with a more or less usual surround in pressed steel, but housed in the upper part of the surround were three panels, normally out of sight; the one nearest the fire was a panel filling the opening, so that in summer it could be pulled down to hide the empty grate, or it could be used as a blower—by keeping it a few inches off the hearth—and as a slow combustion arrangement if it were wished to keep the fire in all night. The middle panel contained an electric radiant fire, and the third was a fine-mesh screen, acting as a fireguard. All three were in harmony with the surround, and were counterpoised.

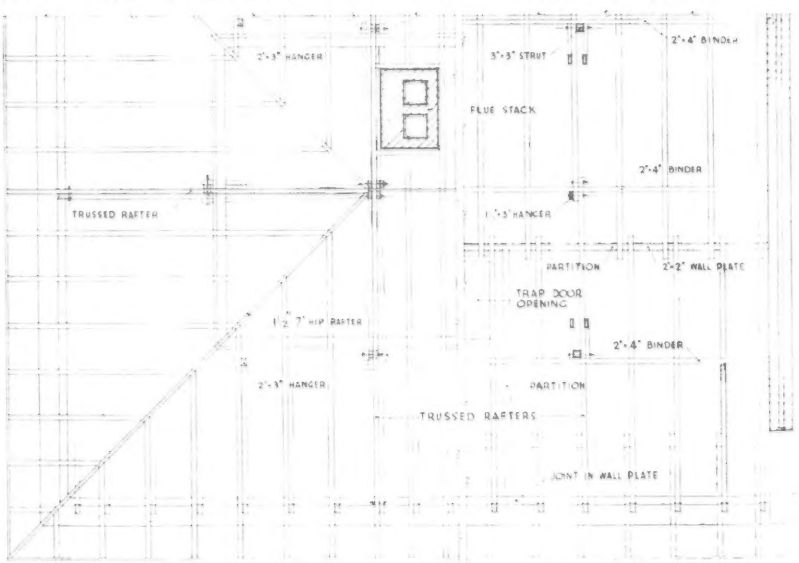
Builders should be interested in the two-piece fireplace surround of R. Hall, as it simplifies fixing and subsequent renewals. The surround is in two parts, the main portion and the frame immediately around the grate. The main surround is fixed first, and the opening is large enough to allow the interior to be fixed, with back boiler if there is one. Then the framing surround is fixed. If renewals are required to the interior or boiler, the frame can be removed without disturbing the main portion of the surround; and, of course, the frame portion itself can be renewed if it gets damaged by careless poker work. A true gadget, for economizing fuel, is the Everburne shield that closes over the fire and makes it slow combustion; and as it is an economizer it has been exempted from purchase tax.



HIP-END TRUSSED RAFTER



DETAILS OF JOINTS



PLAN SHOWING ROOF TIMBERS

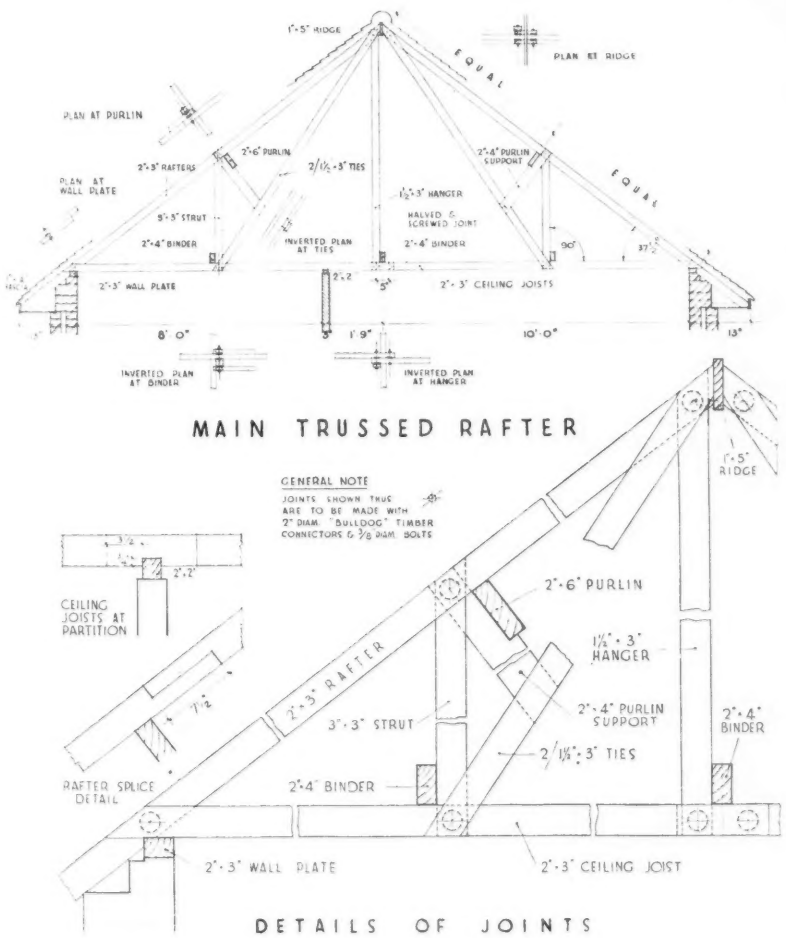
PLAN OF CEILING JOISTS

Flue Construction

Deterioration of the jointing or parging of a brick flue may cause grave trouble, and any means of prevention is worth attention. On the stand of Messrs. True Flue Ltd. their specially designed concrete flue units could be inspected; the system was described in the September issue of the JOURNAL. In finishing ordinary flues several forms of anti-downdraught tops have been produced, but Konquest Products Ltd. showed a neat terminal that should be efficient. It is of precast reinforced concrete, made in three parts, only the centre unit varying to suit the gathering of the flues. The louvring is scientifically designed; and the complete terminal takes the place of the last four or five courses of brickwork and pot.

Internal Finishings

Despite the number of boards of all kinds that are available for wall surfacing, plaster is still in demand, but the timber shortage is rather against the use of the usual laths. Messrs. Broad and Company Ltd. have come to the rescue with their Bricklath, it is made of .04 in. iron wire, with a protective coating of oxide, woven to a ¾ in. square mesh. The points of intersection are covered with little clay blocks, fired at a high temperature. As the material is flexible (it is supplied in rolls) it can be applied to curved surfaces. The wire forms a reinforcement permitting, Messrs. Broad say, walls and partitions to be erected without studding. It should be useful in forming solid balustrading to staircases. Messrs. De La Rue Insulation Ltd. showed Formica laminated plastic material, which they hope to start making in England early next year, instead of importing it from abroad. It is made of sheets of impregnated paper, pressed together under force and heat. Various thicknesses can thus be formed, and it is possible to show prints or notices on the top surface. Messrs. De La Rue claim that it is the hardest laminated plastic, and that it is impervious to the burning cigarette stubs of those who can still afford to smoke. Weyroc fibre-plus-plastic boards were displayed by Messrs. Jicwood Ltd., who had samples showing how abutting edges could be formed either as dovetailed, trench dovetailed, shoulder jointed, tongued and grooved, or half lapped. These alternatives allow a neat and strong junction where one wall right-angles against another.



Sundry Devices

A number of ingenious devices were exhibited which went to show that the present tendency towards standardization has not killed invention. Locks seemed to have received attention, especially as regards simplification in the matter of keys. Messrs. Nettlefold and Sons' Bescot Locking Latch was designed for interior doors; it has two lever handles of normal appearance, but one can be turned to a vertical position, and as long as it is in that position the other handle cannot operate, so that a key is not necessary. Its convenience for doors to bedrooms, bathrooms and so on is obvious.

The lock made by Code Lock Limited has already been briefly mentioned in the JOURNAL but deserves fuller description. Broadly speaking, the principle is similar to that of the Yale pattern lock, but the hills and valleys of the Yale key are replaced, in the Code key, but three movable wards on each side, and their position can be set to a code, as each position is numbered, and the combination can be anything from 0 to 999,999. Six 'combinators' in the lock itself can be turned to the free position and the key—set to its code—is inserted and turned, thus arranging the combinators in their correct position; they are then fixed in that position and the lock can then be operated only by a key set to the same code. If a key be lost, another one can be set to a new combination, and the old key is useless. If desired, all locks in a building can be set for operation by the same combination, so that only one key is required. This lock was widely used for Government purposes during the war, but has now been taken off the secret list.

A device for excluding draughts was Hermeseal, manufactured by British Hermeseal Limited. It was a specially designed strip of phosphor-bronze alloy, flexible and unaffected by rain or damp. When fitted round the frames of doors and windows it will press against their edges and thus ensure a close fit. This kind of device, known as 'weatherstrip' is standard practice in Canada and some continental countries where exclusion of cold draughts is a necessity if a building is to be habitable in winter.

Sound Deadening

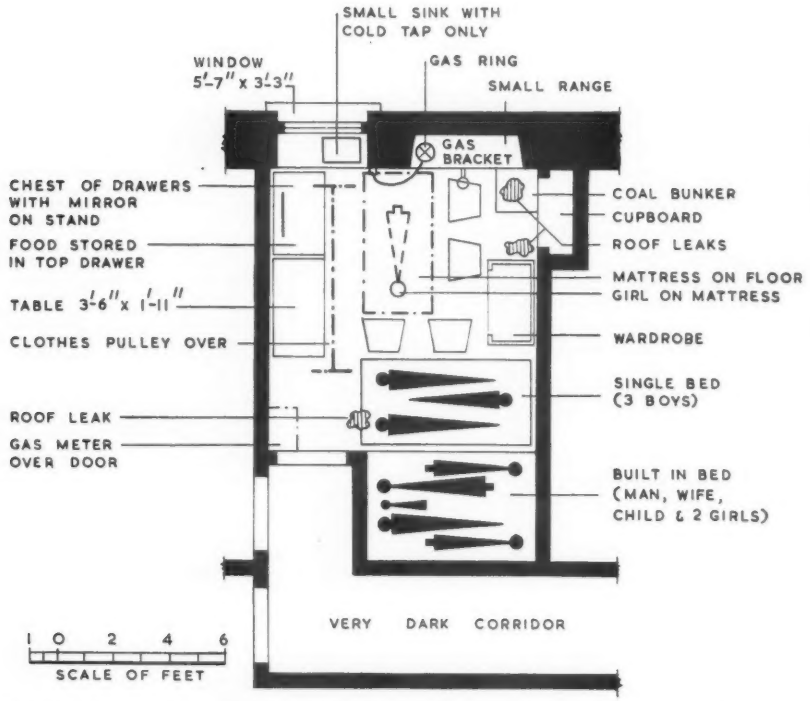
Perhaps modern nerves are more on edge than those of our forefathers; at least we take much greater precautions to deaden sound than they did. The Adamite Company Ltd. had on show an acoustic version of their well-known bulldog clip, in which an insulating pad is inserted between the two halves of the clip.

Correction

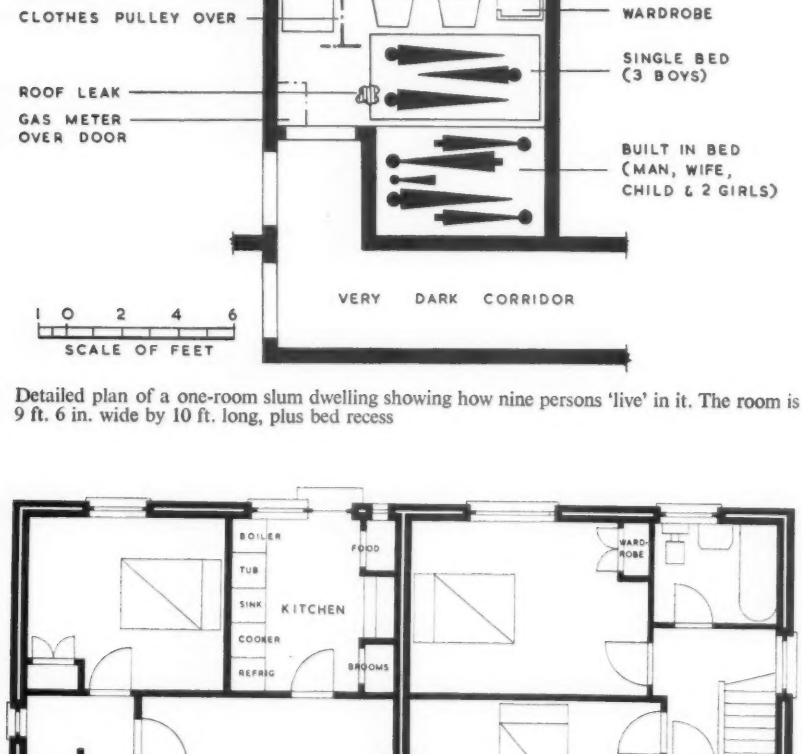
In last month's JOURNAL the design of the Zinc Development Association's stand was attributed to Mr. Hugh Casson. Mr. Peter Inglis designed the stand; Mr. Casson drew the perspective which we illustrated.

A House of One Room

By Ronald Bradbury, Ph.D. [*F*], Director of Housing
Glasgow Corporation



Detailed plan of a one-room slum dwelling showing how nine persons 'live' in it. The room is 9 ft. 6 in. wide by 10 ft. long, plus bed recess

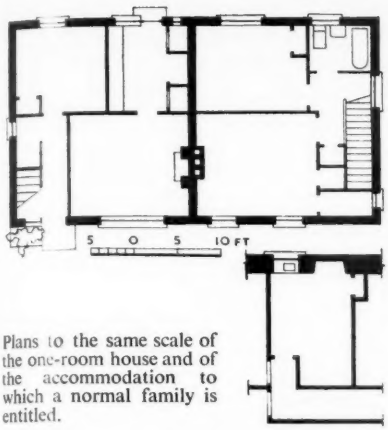


Plan of a typical house now being erected by the Glasgow Corporation for families removed from overcrowded dwellings

PROBABLY at no other time in the history of the architectural profession have so many architects been directly concerned with housing as at the present time. Certainly never before has so much technical data been available to the profession on this important subject, nor so much scientific effort been devoted to the provision of new techniques of house construction for our use. The politicians and the press have argued and written about the subject of housing *ad nauseam*; statistic has followed statistic and cliché has pursued cliché in a never-ending stream; rhetoric has never risen to flowerier heights than on the subject of housing; in fact, lots of people are beginning to feel that, all in all, housing has been overdone in this post-war publicity blitz, and there is a danger that public anxiety on this vital question may give way once more to complacency. Yet, the rhetoric is justified by the facts; the clichés are undoubtedly true though repetitive and trite; and the need for new houses grows day by day greater rather than less. It is essential, therefore, that the architectural profession, if it is to be true to its high principles and ideals, should not lose sight of the great sociological significance of the part which it is being asked to play in the provision of these urgently needed houses. One of the great contributions which architecture can make in this, the 'century of the common man', is the design of decent and seemly houses for every family in the land.

The story of architectural history reveals that in each age the genius of the profession has been largely concentrated on a fairly limited range of building types. Greek architects were mainly temple builders; Roman architects concentrated on palaces and public buildings, whilst the mediæval designer lavished most of his enthusiasm on sacred buildings or fortifications of various kinds. Renaissance buildings were largely designed to meet the needs of the despot or the Church. Today the main problems with which the contemporary architect has to grapple are industrial and commercial buildings of all kinds *and* housing. Unfortunately, very few of the design problems posed to the modern architect offer the same stimulus for intellectual excitement or call upon his ability to create mere monuments to the same extent as in the past. The contemporary architectural problems do give full scope, however, to the 'social conscience' of the architectural profession and in that sense offer more worth while ends to which the ability of the profession can be directed than in any previous age. Architecture today is, by the very pressure of social changes, becoming directed more and more towards the solution of communal problems.

Some of us 'official architects', by virtue of our jobs which bring us into almost daily personal contact with the evil slums of our towns and cities, need no reminder of the vital part which the efforts of the profession must play in the solution of this country's housing problem. Indeed, so terrifying are our routine contacts with the horrors of overcrowding and insanitary living conditions that we are forced to



Plans to the same scale of the one-room house and of the accommodation to which a normal family is entitled.

develop a superficial 'thick skin' if we are to prevent ourselves from developing a morbidly fatalistic attitude to the vast and apparently insoluble problems which confront us. No one, no matter how little social conscience he may possess, can visit the squalid tenements in the highly congested areas of a city like Glasgow without having his mind shocked by the conditions under which so many working class families live out their lives. Fortunately, perhaps, for the peace of mind of many architects who are contributing from the 'drawing-board angle' to the relief of overcrowding and the demolition of the slums, they miss this harrowing direct personal connection with the actual problem they are assisting in solving, and for the benefit of those fortunate members of the profession I thought it might be useful just to set down a description of the physical condition of life of one overcrowded slum family, in an attempt to ensure that the complacency which over-publicity is, as I have already described, tending to cause, does not, so far as the profession is concerned, cancel out the effect which it is desired to create. There is no place anywhere in the architectural profession for complacency about housing conditions in this country in the twentieth century when cases of the kind described below can exist in any of our towns and cities.

The 'house' I wish to describe is in a four-storey stone-built tenement, eighty to one hundred years old, which provides accommodation as follows:

On the ground floor.—Seven single-apartment houses and one shop (sub-divided into a two-apartment house);

On the three floors above.—Eight single-apartment houses, four on each side of the staircase.

The property is very seriously overcrowded, the total population being well over one hundred persons, of whom about sixty-five are children. On the top floor, for instance, there are twenty children and sixteen adults in the eight single-apartment houses.

The building faces directly on to the street. The stonework on the front is badly decayed, and at the rear gutters and rainwater pipes are missing and loose slates from the roof overhang the eaves. The chimney-heads are badly in need of repair, and the roof is, of course, leaking in a number of places. The back-court is unpaved and very uneven, with the result that in bad weather parts of it are just muddy pools. The dustbins for the premises are housed in a tumbledown bin-house, open to the winds, and the garbage is thus exposed to cats, rats and flies.

The only entrance to the building is by a narrow passage or close, just over 3 ft. wide. The stone stair, of the turnpike variety, with very uneven and dangerous winders, faces one at the end of the close-mouth. From each landing, two exceedingly narrow and very dark passages give entrance to the houses.

The lavatory accommodation is contained in a brick off-shoot at the rear of the building, ventilating on to the staircase through holes cut in the ledged and braced doors, and consists of two water-closets to each floor. These water-closets often break down completely, and, since the tenants continue to use them, are frequently in a deplorable condition. There is no glass to any of the water-closet or staircase windows, and the woodwork of same is either missing altogether or badly decayed.

The general condition of the property is poor, but, unfortunately, no worse than that of many of the tenements which adjoin it and which make up the street and, indeed, the whole district.

The particular house I have in mind is on the top floor, and is entered from one of the dark corridors already mentioned. It consists of one room, 9 ft. 6 in. wide by 10 ft. long by 9 ft. 6 in. high, with a bed recess 3 ft. 10 in. deep and just under 6 ft. long. The single window, which is in one corner of the room, is of the sliding sash type, 3 ft. 3 in. wide and 5 ft. 7 in. high. It does not function very efficiently, and it gives a quite inadequate light even on a bright day, with the result that the gas jet on the chimney breast at the side of the window has to be kept burning continuously summer and winter. In passing, it may be interesting to note that the gas bill is more than the rent. The gas meter is of the penny-in-the-slot type, and so great is the consumption of gas that it is full before the collecting day, with the result that special arrangements have to be made for it to be emptied more often than normally. No electric light is available.

This house is occupied by nine persons—a husband and wife and seven children, three boys, aged 15, 12 and 8, and four girls, aged 9, 5, 2 and 8 months. The family, which has occupied this room for nineteen years, has had its name on the corporation waiting lists for a considerable period.

It is hard to visualize what conditions must be like when all the family are at home (if this dwelling can be dignified by that name!). Three boys sleep in a single bed which has been put up in front of the recess bed, the latter being used by the husband, wife and three girls. The girl of 9 years sleeps in a bed made up each night on a mattress on the floor.

The sole access to a tenement where more than 100 persons dwell, including 65 children

This home is, naturally, sparsely furnished. There is no room for the normal furniture which a family of this size requires. It contains the single bed already referred to, a small table, 3 ft. 6 in. by 1 ft. 11 in., usually placed against the wall, four bentwood chairs, a small wardrobe and a chest of drawers. Even with these few items the room is hopelessly overcrowded, and to move from the door to the fireplace is a difficult and tortuous proceeding.

There is a wall cupboard or press in one wall, but it is too damp to be used, and is blocked up by the wardrobe and a small coal bunker, 1 ft. 6 in. square. Pots and pans are kept under the wardrobe, and the bread is wrapped in a towel and put inside, along with the clothing of the whole family. The other food is kept in the chest of drawers. It cannot be left out owing to the depredations of mice. A cat is an absolute necessity to keep these pests under control.

Although there is a small coal-fired range, it cannot be used as it is decrepit and smoky, and all cooking is done on a single gas-ring on top of the hotplate of the range. There is a small sink under the window, but, of course, there is no hot water. Such washing as is done in the house has to be carried out in the sink with water heated in a small pan on the gas ring. There is a small ceiling pulley for drying clothes, although, naturally, it is not much use for airing them owing to the atmosphere of the room. Nobody uses the back-court for drying, as, quite apart from the lack of hanging facilities, the clothes would be stolen. The very decrepit wash-house at the rear of the building, although a most objectionable apartment, could be used more often if it was not required by so many tenants; indeed, each tenant normally gets only one hour once a fortnight in the wash-house.

Back elevation of the tenements containing the 'house' here described. The view shows the brickwork 'offshoot' housing the W.C's

Swedish timber houses recently built in Glasgow and providing accommodation for families of similar size to that described

The health of the family living under these conditions is naturally bad. The fact that the husband, after serving five-and-a-half years in the Forces, was discharged from Italy on medical grounds with disseminated sclerosis does not help. Most of the children have chest trouble, and the girl of 5 is under observation for tuberculosis. The rent for the room, including the rates, is 19*s.* 4*d.* a month.

Unfortunately, this is no isolated example. It could be paralleled many times over in the City of Glasgow, and in most other towns and cities up and down the British Isles. It exemplifies a standard of living which is an abomination, and which must be done away with for ever at the earliest possible moment. There is no wonder that crime, drunkenness and juvenile delinquency are so prevalent; indeed, it is a miracle that the incidence of all these evils is not very much higher. In my opinion, it is a great credit to the British character that so many people are able to live decent and honourable lives under such conditions.

The facts speak for themselves! I leave it to abler pens than mine to describe the way of life of families condemned to 'a life in one room'. Only normal imagination is needed, however, to envisage the effect which these crowded conditions are bound to have upon the morals and outlook of the unfortunates who tenant them. Privacy is impossible. Every action of each individual in the family, no matter how private and personal, is bound to be common knowledge to all the occupants of the home.

As a basis of comparison, I have included a diagram showing to the same scale the plan of this dwelling and the plan of one of the new houses which are now being built for the luckier families. This is, I think, sufficient to dramatize the situation. The emphasis of contemporary civilization is and must remain on communal requirements. The needs of the community must bulk large in the field of architectural activity. The social conscience of the architectural profession must be ever on the alert to see that it carries out everything possible to help. The aim of all professional activity must be to broaden the stream of conscious effort to cover both the needs of the citizens as individuals and as a mass. 'The daily round, the common task' must now furnish nearly all the architect ought to ask. The architect of today is no longer an individual working to meet the demands of a few other individuals. He is a specialized servant of the community, advising and designing to meet the needs of that community.

Unfortunately, the architect's interest in this emphasis upon 'community' is still rooted largely in æsthetics. The architectural profession as a whole is not sufficiently indignant about the social conditions of our time. Its interest is as yet largely in 'form and function' and not in 'flesh and blood'. I believe that until it becomes white hot about the evils of slumdom and overcrowding it cannot take its rightful place as one of the leaders in the war upon these evils. It will be a spectator only on the sidelines, called in now and again for consultation, whereas it ought to be in the thick of the fight. The great architecture of the past was designed by architects who had a common aim, which revealed itself in the sympathy of their buildings one to another, and the excellence of each. If twentieth-century architecture is to rise to the same heights the social and æsthetic urges must be fused into one overwhelming and common purpose.

Editors Note

Lest readers who are not acquainted with the ways in which the poor live in towns may suspect that Mr. Bradbury is exaggerating the evils of slumdom, the following quotation from the Manchester Plan may be noted: 'The Medical Officer of Health has estimated that 68,000 houses . . . . are unfit for human habitation . . .' (p. 169) and 'large families of six, seven or eight children were brought up in houses of four rooms, and sometimes in dwellings of only one room up and one room down' (p. 158). Moreover, many architects who served abroad in the Forces have seen similar conditions in other countries. No country is wholly free from slums. It is an international problem. One of the greatest handicaps to its solution is that hardly any persons who fill posts of responsibility in Governments or who provide progressive ideas ever visit slums. They may see photographs of slum streets and yards, but they do not actually see or *smell* the crowded and inevitably filthy interiors. Out of sight too often means out of mind. Such things are left to a few municipal officials, such as Mr. Bradbury, and to welfare workers. His informative article is therefore a timely reminder of a great task which lies before municipalities and their architects.

Correspondence

NATURAL LIGHTING OF SCHOOLS

Sir,—On page 24 of the November JOURNAL Mr. Allen dismisses my criticism of Regulation No. 39 on the ground that it involves the contention that 'countries which were pushing office lighting up to 40-50 ft.-candles must be doing infinite damage'.

Very probably they are.

It would be interesting to learn whether there is any reason for the huge increase in the pre-war standard of natural lighting in schools, which has already caused so much trouble, and will cause more, other than a desire to bring it into line with increases in the intensity of artificial lighting which have long been recommended assiduously: but not, I think, by any ophthalmic or medical authority.—Yours faithfully,

PERCY J. WALDRAM

Book Reviews

The English Townsman, by *Thomas Burke*. 8½″. vii+151 pp. Batsford. 1946. 12*s*. 6*d*.
The untimely death of Thomas Burke has deprived students of many projected works on social life. His studies of 'English Night Life', 'The Streets of London' and 'Travel in England' are now complemented by 'The English Townsman' and thus a sequential series is rounded off.

The importance of social customs, past and present, has long been appreciated by architects who take an interest in causations. This was particularly the case during the Gothic revival when interest in the Middle Ages was awakened by Pugin, Parker and others. Today that interest has widened to include all periods of history with very considerable results to the understanding of Art. Thomas Burke approached his subject primarily as a historian, but his main objective was to show the continuity which exists in all phases of everyday customs. In the present book the narrative begins with mediæval times and is carried through Stuart, Georgian and Victorian periods to town life of today. The author possessed the power of condensing a wealth of detail within a small compass, and this without tiring the reader. Descriptions of social life have become part of English literature, in fact form a specialized branch of each succeeding age. Formerly the student had to consult a dozen or more works from Chaucer to Harrison, followed by references to Dekker, Defoe and to the eighteenth-century humorists before he could picture the social bearing of one period on another. At the beginning of the nineteenth-century, such works as 'Real Life in London', with illustrations by Heath, Alken, Dighton, Brooke and Rowlandson made a general appeal to contemporary taste. Then came works illustrated by Gavarni, Leech, Richard Doyle and Gustave Doré, to mention only a few of importance.

The seventeenth-century writer Thomas Dekker states the case for the old and the new in an entertaining way by writing 'good clothes are the embroidered trappings of pride, and good cheer the very eryngo-root of gluttony, so that fine backs and fat bellies are coach horses to two of the seven deadly sins'.

This quotation does not disparage the finer qualities of town life which the author extols, but it does explain a good deal of the rowdyism and posturing which seemed to delight our forbears.

From the vantage point of today we are in a position to compare past phases of the national character; to realize that every period had its seamy side and that all was not superbly even.

Although not so strikingly apparent, social life in towns today is not one whit less fascinating than it was in the past, mass amusement may be vulgar, mass housing frightening, but there are many compensations. Those who know their London well will find survivals of market life in the New Cut at Lambeth, at Whitechapel and in Soho. Further afield they will recall the Statute fairs and the enlivening scenes of market days in provincial towns. There is still the line of book stalls and print shops, the charm of street scenery and in some quarters the survival of horse-drawn vehicles. Town life crystallizes past and present and holds us spellbound.

Thomas Burke has set all this down in print and we should be grateful to his memory.

A. E. RICHARDSON [*F*]

Coventry Cathedral. Report by *Lord Harlech's Commission*. Oxford: University Press. 1947. 1*s*.
In this country the whole business of putting up an important public building is invariably accompanied by a tremendous amount of emotion and discussion, which might lead a stranger to suppose that we cared a great deal for good architecture. Alas, this is not so, all we wish to do is to ensure that something neuter will emerge.

In 1940, on 14 November in an air raid, the Gothic Cathedral at Coventry was destroyed except for the 15th century tower and spire. St. Michael's had only been a cathedral for 22 years; it had not, the Report states, succeeded in becoming 'our' cathedral to Warwickshire folk, and its red sandstone, elaborately decorated, was 'a constant source of trouble and expense' in the chemically laden atmosphere.

In 1941 a committee was set up under Lord Esher, and decided, among other things, not to select an architect by competition.

In 1942 Sir Giles Scott was therefore appointed, but in view of his age, the position was to be reviewed after five years. Then, on 19 December 1946, the Royal Fine Art Commission told the Bishop that Sir Giles' designs were not approved and recommended that they should be abandoned. One objection appears to have been that the outside was Gothic, while the inside had been altered to suit the Bishop and was 'modernistic'. Sir Giles resigned, and the Cathedral Council appointed a Commission under Lord Harlech, whose report is now published.

It was obviously necessary to formulate a programme and sort out, among other things, whether there was any need for a cathedral in Coventry at all—there is in fact a strong case for moving it to Warwick. All this the report clears up admirably, clearly, and even with tact, as where it shows that in fact a large congregation just does not exist and cuts down the seating accordingly. The Commission decides finally on the old site for the new cathedral.

Inevitably it is on style that the Commission fails. 'The new cathedral should be built within and without in the English Gothic tradition in good weathering red sandstone. It should not be copied from the old, but should not be in violent contrast'. In other words something to suit everyone, a compromise, a building in good neutral taste.

The last quoted sentence could mean a good building, though possibly a violent contrast might mean a better one. But what is the 'English Gothic tradition'? Evidently not Sir Giles Scott's style; whose then?

Will a good building result from all this, must be our final question. I doubt it. But what a pity. The two towers, St. Michael's and that of Holy Trinity next to it are lovely and the calcined walls and tracery of the ruins a perfect setting at their feet.

I would not have any shaven lawns, but leave the piles of stone and paved surfaces almost as they are and very carefully introduce plants and trees here and there, many varieties would thrive among the great stones. Then, if there is a real need and the zeal to build a new church, I would place it very close by, on the open space to the north, carefully relating the new church to the existing buildings and linking them by garden work. It would be an excellent opportunity for giving the work to a young contemporary architect, sensitive, well trained and imaginative; give him the opportunity of using the finest materials and workmanship which our century can still offer, but leave the rest to him, remembering the very wisest words spoken in this whole affair, by Sir Giles Scott on his retirement:

'These differences of opinion and the formation of numerous societies, committees and commissions, etc., to give them expression, are characteristic of our time; they harass the unfortunate artist and hamper the production of good work. . . .'

H. TAYLER [*F*]

The Building of Bath. An architectural and social study. By *Bryan Little*. 8¼ in. 176 pp. +pls. Collins. 1947. 15*s*.
Mr. Bryan Little is a scholar of wide reading in social and architectural history and has a facile pen withal. As the subtitle, '47 to 1947' indicates, he has dealt with *The Building of Bath* from the earliest known to the present day, correlating the architectural developments to the social changes and demands of the various periods.

He has chosen to depart from generally accepted historical data in certain cases, but does not state upon what authority. He attributes the prison building to Jones, whereas Thos. Attwood's plans are thought to have been approved by the City Corporation in 1770 and the work commenced in 1772. For some reason he entirely omits any reference to Attwood, who also designed the Paragon and Oxford Row and a scheme for the rebuilding of the Guildhall, which was started but stopped upon his death from falling debris in the demolition of the old Guildhall. The attribution of the Grammar School to Wood and Somerset Buildings to Baldwin would not appear to be in accordance with generally accepted fact. His reference to the shop front for the Ministry of Labour in Broad Street (p. 155) is an exaggeration in terms and in criticism which is regrettable.

However, Mr. Little is to be congratulated upon a most readable and very useful addition to the bibliography of Bath, which should find a place in the shelves of an architect's library. The photographs, taken from the *National Buildings Record*, are also excellent.

W. SYDIE DAKERS

Good Design Good Business, by *John Gloag*. (Council of Industrial Design: Scottish Committee.) 7¼ in. 78 pp. text illus. Edin: H.M. Stationery Office. 1947. 1*s*. 6*d*.

This little book was published for the Scottish Committee of the Council of Industrial Design in connection with the recent Exhibition 'Enterprise Scotland'. As its name implies, it is addressed mainly to business men, especially manufacturers, and is written with all the authority of one combining great experience in the service of industrial design with a thorough understanding of its commercial value. At long last the importance of good design in the production of manufactured articles is beginning to receive general recognition but it has taken a major economic crisis and a sharp decline in our trade to bring this about. Taking the long term view it may well be that too much stress is being laid on the economic aspect of the matter and too little on the cultural, since design is not only an aid to material prosperity but, what is far more important, an antidote to materialism. Be that as it may, such books as this serve a useful purpose in helping to break down the barrier of suspicion with which the designer has for so long been regarded in this country by the majority of manufacturers. Being addressed to business men, the contents are set out in a businesslike way. They define the functions of industrial designers, give examples of their work and describe in detail actual commissions which they have carried out. The illustrations cover a wide field including American and Continental examples and are well selected and reproduced.

JOHN GREY [*F*]

The Countryman at Work, by *Thomas Hennell*. 11½ in. × 8½ in. 80 pp. incl. pls. and front. Text illus. Architectural Press. 1947. 12*s*. 6*d*.

It is good to have these drawings rescued from those back pages of the ARCHITECTURAL REVIEW (in advertisements), where they first appeared, one by one, during the most painful period of the war.

The drawings are beautiful, sensitive and yet sturdy, and the whole process of drawing and writing seems itself like one of the country industries illustrated.

These are not building crafts except for *The Kentish Thatcher*, and this must be a cause for regret to architects, as this artist would have been the perfect recorder of those crafts which the young Edwin Lutyens discovered driving around in a pony trap with Gertrude Jekyll, and which he later absorbed so skilfully into his own buildings. Fifteen country occupations are described, Ladder-maker, Windmiller, Scythe-smith, Woodman, Hedger, Cider-maker among them.

The author, Thomas Hennell, from the rather over-long memoir by H. J. Massingham, and from the excellent drawing of him by Vincent Lines, seems to have been consistent with our whole impression, a countryman himself at work. Hennell's own descriptions accompany the pictures and are wonderfully direct, simple and informative like the drawings. There is throughout that air of consistency with itself which marks a true work of art.

There is also an air of sadness about the book for two reasons. One is the obvious decline of the crafts described. Whether we like it or not we are slowly having to adjust ourselves from a state of agricultural to industrial living throughout the world. The basket-maker feels it. 'He always used to be singing at his work; but not late years —these times get you down'. The other reason is that Hennell was killed by the terrorists in Java in 1945, aged forty-two.

H. TAYLER [*F*]

The Industrial Design Consultant. Who he is and what he does. By *F. A. Mercer*. 7½ in. 47 pp. + (96) pls. Studio Publications. 1947. 10*s*. 6*d*.

This is a Paper read by Mr. Mercer, Editor of ART AND INDUSTRY, before the Royal Society of Arts for which the Society's Silver Medal was awarded. It has a preface by Sir Thomas Barlow, G.B.E., till recently Chairman of the Council of Industrial Design.

In dealing with his subject the author keeps both feet firmly on the ground as is at once made clear in the introduction in which he says: 'The industrial designer is retained by a manufacturer with one object only: to increase the demand for his products through their increased attractiveness to the consumer. He is paid by the manufacturer according to his success in achieving that object. The industrial designer stands or falls upon his ability to create and maintain profitable trade'. But he goes on to point out that this fact is in no way a slur on his artistic integrity since his job is to produce the best designs he can and in the performance of his service to his employer he will tend automatically to raise the standard of public taste.

The first part of the Paper is devoted to explaining the difference between the industrial designer and the design consultant. From it we understand that whereas the industrial designer may often be an employee of a firm of manufacturers designing for that firm alone and engaged on one type of product, an industrial design consultant is not only his own master but employs his own specialists and is at the disposal of any producer who likes to call him in. To get the best out of him he should be called in at the birth of any project, or, better still, at its conception, and should be allowed to see the job right through.

The author goes on to describe the whole set-up of an industrial design consultant's office, and discusses methods of recruiting and training staff and of remuneration.

The typography of this little book reaches a very high level as might be expected since it was designed by Sir Francis Meynell, R.D.I.

JOHN GREY [*F*]

Trees for Town and Country: prepared for *APRR* by *Jaqueline Tyrwhitt* and *Brenda Colvin;* illustrated by S. R. Badmin. 11¼ in. pp. 132. Lund Humphries. 1947. 25*s*.

This most useful and timely book sets out to give illustration, description and horticultural information of sixty hardy trees suitable for general planting in the British Isles. It is primarily intended for the layman in landscape design—architect or town planner—and will bring to his notice a wider choice of trees than is usually found in tree planting schemes. Whether the architect or town planner is the right person to prepare tree-planting schemes is of course very doubtful; but if he doesn't, then some equally cherry-minded horticulturalist very often does, and this book goes for him too.

The arrangement of the book, except for the absurd idea of putting the trees in alphabetical order of their English names, is neat and methodical; each double page opening deals with one tree—its photograph in summer, its description and drawings of its winter appearance, size at various ages, and details of leaves and flowers. The photographs, many of which have been specially taken for the book are good, but could have been shown larger by bleeding-off, and some have poor definition, either because they were taken with a miniature camera or spoilt in blockmaking. S. R. Badnun's drawings attempt the impossible and achieve considerable success. The text is clearly presented under tabulated headings. I think *more* information could have been given on how to thin and prune trees for example, including how not to; the white area on each page is handsome but might have yielded to more text; but still, this is a layman's book; the essentials are here and the expert can look elsewhere. He will certainly look a long way before finding more sense than Brenda Colvin has packed into her admirable three-page introduction.

PETER SHEPHEARD [*A*]

More Beautiful Norfolk Buildings. Sketches and notes by *Stanley J. Wearing* [*F*]. 8vo. pp. 63. Norwich: Soman-Wherry Press. 1947. 15*s*.

'More Beautiful Norfolk Buildings' is a welcome second publication by the same author of his records, both pictorial and descriptive, of ancient buildings, secular and religious, which abound in that county, and, as he states, are 'well nigh inexhaustible'.

His enthusiasm in searching out the numerous examples he has portrayed in his skilful and carefully delineated sketches of these splendid works, together with the interesting notes which accompany them, place all lovers of East Anglia under a debt of gratitude to him.

Mr. Wearing's work in Norfolk recalls that of others elsewhere, who have left similar pictorial records, the originals of which are now much sought after, and add interest to many a church vestry. One may confidently anticipate that Mr. Wearing's fine drawings will be equally appreciated and ultimately find a similar harbourage. Every vestry should be enriched with topographical sketches such as these.

His interests are varied and in illustrating his discoveries of wayward or unusual subjects, whether of church tower or porch, of Royal Arms Board or Commandment Board, of sword rest, mace rest, and mural tablet or of some 'back-yard' view of an inn, a dwelling or of a

street, the author is chiefly concerned to share his pleasures with others. For this reason he has often, as he explains, sacrificed the composition of his drawing the better to enable him to indicate some feature he wishes to show his reader, and his observations indicate the same desire.

In the author's comments on Blickling Hall, he quotes the architect, William Ivory, 'My poor father was a great assistant to me in perfecting these sorts of ideas, and I am very diffident of my own opinion of them.' Mr. Wearing is imbued with the younger Ivory's modesty, for his notes suggest the subordination of his own views to those of others. His references to inns are redolent of wonderful repasts which our present Ministers might describe as 'Hangovers of the bad old days', whilst his remarks on local celebrities add considerable interest to this highly commendable and fascinating production.

Flats. Modern developments in Apartment House construction. By *H. Kamenka*. 9¾ in. 144 pp. + pls., text plans. Crosby Lockwood. 1947. 15*s*.
It is evidently the purpose of this book to cover the subject of flats from 'A to Z', though what section of the public it is particularly intended to interest is not very clear.

Many of its 137 pages of text tend unduly to reiterate the virtues of this kind of development, and do so largely by reference to the more or less familiar features of the American apartment house, so that to the planner in search of a fresh approach to the problem of housing in cities there is little here to arrest attention.

Plan types are illustrated whose chief merit would seem to be the degree of density which can be obtained, or the success with which the fewest lifts can be made to serve the most flats, with the result that such basic considerations as orientation, etc., are overlooked.

Were it not for the fact that some sad but recent examples of large housing development projects in New York are illustrated (without apparent awareness of their faults), it would be difficult to realize that this book is a product of 1947.

E. ARMSTRONG [*F*]

Sanitation, Drainage and Water Supply, by *G. Eric Mitchell*. 3rd ed. of Modern Sanitary Engineering. 9″. 192 pp. text illus. Newnes. 12*s*. 6*d*.
A third edition of this book, of which the second edition was reviewed in this JOURNAL in the May 1947 issue, has been published. Any modifications appear to be of a minor nature.

Patrick Geddes in India. Edited by *Jaqueline Tyrwhitt* in co-operation with *H. V. Lanchester* and *Arthur Geddes*. 8½″. 103 pp. + 32 pls. text plans. Lund Humphries. 10*s*.
Have you been to the Far East? Have you been among a dark-skinned crowd in the fabulous glare of the noon-day Indian sun? Have you ever wandered among the crowd so chattering, shuffling, shouting, but withal so human? If you have not, then read this thrilling book; if you have, read it all the same. For however much you may think that you know of the town and country planning problems of modern India, the knowledge of Geddes always has been, and probably ever will be, beyond you.

In this absorbing book Sir Patrick (but *this* time the surname must be Geddes!) emerges, from the first viewpoints of Town and Country Planning, of human life, of past, present, and future, as the Master of Masters.

Briefly, for planners and for public, he lays down seven essential rules:

1. Seek to enter into the spirit of your city; its historical essence, and continuous life.

2. When you plan for people, give them the same care that you should give when and if you were to plant or to transplant flowers.

3. When you plan, don't rush into theatrical effects, which in the end will be disappointing, but instead, consider carefully the existing conditions *as a whole*.

4. Try to turn the difficulties of town or country, or both, into new and exciting opportunities; remembering always the order of life in development. Geddes gives here the viewpoint of biology, with which department of knowledge, of course, he started in life.

5. Avoid the effort of 'Haussmannising' your close-knit Indian slums, by cutting out whole sections of them ruthlessly, with a single blade of the T-square, into a poor imitation of the Boulevard des Italiens; but, develop them on more considerate lines, by removing the worst house here, and the narrowest and most insanitary lane there, bit by bit; all of which will cost less, and be more comforting to the people.

6. Don't forget that the Indian family, in contrast to the European one, in size is vast, with many 'sub-families' centering round the grandparents or great grandparents; thus easing and quickening the process of neighbourhood replanning and rebuilding; even though to inexperienced Western eyes, such wholesale removals may appear as overcrowding. But in Geddes' own words, 'House pride and family pride . . . are fundamentally the same in both East and West.'

7. Geddes makes sure that he does not omit the place of Faith, relating how 'This unity of thought and feeling, by which an emotional idea is clearly imaged into vision and warmed to aspiration and purpose, is the essential of religion; and ethics finds its realization when emotion kindles thoughts or vision to ACTION!'

Geddes forgets neither trees, gardens, and landscape; nor, in a delicious passage reminiscent of a first-class novel, the value of direct talk and personal contact between planners and the simple, but by no means unshrewd, country folk and townsfolk.

Undoubtedly the best part of the book is, amusingly enough, the end; where Geddes demands from the Maharajah of Indore, the Gracious Permission to make him (Geddes) 'Maharajah for a Day'; and, how, having been given such permission, 'Maharajah Geddes' brings before the Indian multitude the Grandest of Grand Processions, a procession showing off the worsts, all the mediums, and all the best things in the so urgent replanning of the town and surrounding countryside of Indore.

This magical touch which should finish the book for you, the reader, with a convinced and hearty laugh, seems to be due to the ever better known pertinacity, shrewdness, and hard work, of Miss Jaqueline Tyrwhitt, the book's main editor.

The photographs, with one or two notable exceptions, are indifferent; and, by the way, the Preface is by none other than Lewis Mumford.

E. LEWIS [*A*]

Timber. Its Structure and Properties, by *H. E. Desch*. 2nd Ed. 8¾ in. xxii + 299 pp., front folding, + 55 pls. text illus. Macmillan. 1947. 18*s*.
The first edition of this book is well known as an authoritative treatise, but since it appeared, in 1938, research and investigation have added appreciably to the amount of information on the subject. In this second edition the author has taken full advantage of consultation with such authorities as the Forest Products Research Laboratory and the Timber Development Association to bring his material up to date.

For the benefit of those not familiar with the earlier edition one may outline its contents briefly as follows. Part I deals with the structure of wood in 30 pages and includes a number of excellent photographs. Part II covers the gross features of wood and discusses the problem and procedure of identification of timbers. In Part III the properties of wood, such as density, strength, moisture content and moisture movement and thermal conductivity are described. The fourth part considers the factors influencing the use of wood and includes notes on seasoning, defects in timber, wood preservation and a useful chapter on grading. The final chapter deals briefly with some aspects of wood as an engineering material, including the use of the now fairly familiar ring connectors and a little information about recent developments in glues.

Although not written primarily for architects and perhaps not of great direct value to them, this is probably the best and most readable book which provides a valuable broad background for anyone interested in the subject of timber and its structural use.

C. C. HANDISYDE [*A*]

Sevenoaks and District Civic Society. Third Annual Report, 1946–1947. [1947.] 1*s*. 6*d*.
A comprehensive report on the work of the various committees, which includes a plan for the development of Sevenoaks Town Centre. This scheme has been prepared by Mr. W. H. Ansell, who is President of the Society.

The Consulting Engineer Year Book 1947. 4to. pp. 214. London. Princes Press, Ltd. 1947. 15*s*.
Three useful reference books, revised and re-issued.

Obituaries

Mr. James Miller, R.S.A. [*F*], who died on 28 November, was one of the most eminent Scottish architects of the past half-century. He identified himself for nearly the whole of his working life with Glasgow, and, while many buildings designed by him were erected in London and elsewhere, it was in Glasgow that he made his name and did his greatest work.

James Miller was born at Auchtergaven in 1860, and received his early education at Perth Academy. Determined from the first to become an architect, he served his apprenticeship in Perth, and went to Glasgow in 1888 as architect to the Caledonian Railway Company, for whom he did important work both before and after starting practice on his own account in 1893.

It was the acceptance of his designs for the Glasgow International Exhibition of 1901 at Kelvingrove that marked Miller as an architect of outstanding ability and made him known all over Great Britain.

His work for the railway company, which went on steadily, included the cleverly constructed subway station at St. Enoch Square, the Botanic Gardens Station, and Kelvinbridge Mansions in Glasgow, as well as the stations at Princes Pier and Gourock, the large hotel at Turnberry, and stations on the West Highland Railway.

The renaissance designs which he submitted in a competition for the great museum at Bombay were accepted in 1908. A little later he was successful in competition for the new building of the Institution of Civil Engineers in Great George Street, Westminster. A year afterwards his designs were accepted for an extensive addition to the buildings of the Institution of Mechanical Engineers, also in Westminster.

For Messrs. Cadbury he carried out a scheme of buildings at Bournville, unique at the time as a breakaway from the ordinary industrial manner, while in Glasgow he seemed never to have been without important work on hand during his long professional career.

For the University he designed the new Medical School and the new Natural Philosophy buildings. Among other buildings designed by him were the two Royal Infirmaries of Stirling and Perth, the auxiliary hospital at Canniesburn, Glasgow, the Anchor Line offices in Glasgow, the head office of the Union Bank of Scotland, Glasgow, the West George Street and Bothwell Street offices of the Commercial Bank, Glasgow, and the Municipal Buildings of Clydebank.

Other important work undertaken by Mr. Miller included the new broadcasting house at Belfast, the large extension of Queen Margaret College in Glasgow—which converted it into one of the finest broadcasting stations in the country—the Glasgow and West of Scotland Commercial College; and the replanning and reconstruction of the buildings which became the Royal Scottish Automobile Club in Blythswood Square.

Mr. Miller was elected an Associate of the Royal Scottish Academy in 1901, and became an Academician in 1930. He was a member of the Royal Fine Art Commission of Scotland, and was one of a committee of seven for the Department of Health on matters relating to houses for the working classes.

He is survived by his wife and two daughters

Messrs. J. Wellwood, Manson and James C. Walker have sent the following appreciation: '*Achievement is but another milestone along the highway of progress—the end of the journey lies ever beyond.*'

These lines aptly describe the outlook on life by Mr. James Miller, who died at his home in Stirling on 28 November 1947. In practice for close on half a century, he devoted his whole life to architecture, each achievement acting as a stepping stone to some further success never halting until his retirement from business at the end of 1940. This is not difficult to believe when one considers the tremendous volume of work which he accomplished in his lifetime. Success came early when he won the competition for the Glasgow International Exhibition in Kelvingrove Park, Glasgow in 1901. This marked him as an architect of outstanding ability, and from then onwards followed a succession of highly important works.

Apart altogether from the volume, the quality and variety of Mr. Miller's work was truly remarkable. He appeared to have no special preference for any particular class of work and attacked each problem with equal enthusiasm, whether it be important public building or humble cottage. All his buildings served their particular function, and much of his success might be attributed to his ability to look at the problem from his client's point of view as well as from that of the architect.

He was particularly successful in competitive work, some of the more outstanding examples being the 1901 Glasgow International Exhibition, the Institution of Civil Engineers, Westminster, and the Head Office of the Union Bank of Scotland, Glasgow.

Very reserved by nature, he did not enter much into public life and was well content to let others talk architecture while he was doing the job. Quick tempered, he could also be very sympathetic and understanding when the occasion demanded. He was also a hard task master, but few of the men who passed through his hands will deny that they benefited to a remarkable degree from being employed by Mr. Miller, and many of them, now successful architects on their own account, have since written him to this effect.

To the general public Mr. Miller was known chiefly for his large public buildings and commercial work, but there were few types of buildings which he did not design at some time or another during his career. Public buildings, commercial buildings, factories, hospitals, churches, banks, schools, houses, etc., are all included in his long list of successes. Though perhaps it was in his domestic work that the personal touch was most clearly shown, all his buildings expressed his character and individuality.

Mr. Miller was a regular exhibitor at the Royal Scottish Academy, and was proud of his recognition when elected Academician in 1930.

At one stage in his career a famous architect made a tentative approach with a view to partnership but, after careful consideration, Mr. Miller decided to plough a lone furrow, and this he did most successfully to the end of his days.

William Thomas Benslyn [*F*] We regret to record the death of William Thomas Benslyn [*F*]. Mr. J. B. Surman [*F*] writes: William Thomas Benslyn, or W. T. B. as he was affectionately called by his friends, was a man of outstanding personality and charm, and the impact of his forceful character, which was not always understood by chance acquaintance, rapidly changed one's feelings on closer contact, and produced a respect for the opinions expressed by him, by their transparent honesty. This honesty of purpose was the basis of his whole life and work. His trained intellect and cultured mind enabled him to grasp at once the essentials of any problem that his mind grappled with, be it social, economic or architectural. In his work, his strong and virile nature swept aside all difficulties and while he never suffered fools gladly, yet his intense zeal inspired those around him with his own enthusiasm. The friendliness and joyous spirit he possessed was contagious and provoked continual effort and determination amongst his colleagues and staff. These strong qualities of character made him a born leader, and I believe that the profession in general, and Birmingham in particular, have much to thank him for.

W.T.B. was educated at King Edward's High School, and after serving articles with Mr. Thomas Long, architect, of West Bromwich, won a scholarship to the Royal College of Art. During these early student days, while working in the evenings at the Birmingham School of Art, he came under the influence of men like the late W. H. Bidlake and Charles Bateman, and in those far-off days these qualities of mind that materialized later, began to be touched and quickened. While at the Royal College of Art he came under the influence of men like Professor Beresford Pite, and he always gladly expressed his sense of gratitude for those days. After obtaining his Associateship of the College, he became an Associate of the R.I.B.A. in 1911, and for a short period acted as Architectural Master at the School of Art, Cambridge, and from there he joined the office of Robert Atkinson.

1914 saw him joining up with the Artists' Rifles and in the R.E.s he saw service in Gallipoli and Serbia and later in France. He rejoined the office of Mr. Atkinson in 1920 and remained there for about four years, during which time he married. In 1923 he won the Godwin Bursary and travelled to the United States to study the planning of flats and apartment houses, and later published an interesting account of his investigations. After the sudden death of his young wife, which hurt him deeply, he left London and for some years joined me in Birmingham. In 1926 he married Miss Gizella Jonas and her comradeship till the very end was a great help and joy to him.

In 1930 he was elected a Fellow of the Institute. Later, in about 1932, his practice had grown very considerably and he was busy with the rebuilding of the Manchester Hippodrome for Bernstein Theatres Ltd. It was an exacting and difficult piece of work that called for all his knowledge of design and construction and his flair for handling people. He was also engaged in building cinemas at Hyde, near Manchester, and at Market Harborough for Union Cinemas Ltd., as well as being preoccupied with projected schemes rendered abortive by the outbreak of war.

He was at his best when he was busy, and opening days found him assured that he had covered all eventualities, and in rare cases in which something went wrong, he was masterly in recovering the position, and nobody enjoyed a critical situation better than he did. It might well be said of him that in all his dealings, both with clients, sub-contractors, clerks of works, and foremen, he was scrupulously fair and just and kind. It was his hope that some day his only son (who at this time was studying architecture at the Birmingham School) would in due course take over his practice, but his death in rather tragic circumstances in 1939 robbed him of this hope, and dealt him a blow from which he never fully recovered.

He became vice-president of the Birmingham and Five Counties Architectural Association in 1931 and 1932, and in 1933 its president, and was re-elected again in 1934; and again during the war years he came back and filled the post of vice-president for the years 1942, 1943 and 1944. The Birmingham Association owes much to his activities extending over many years and his wisdom in council has done much for the benefit of architecture as well as for the archi-

tect and the student, and the Birmingham and Five Counties Association will long remember his faithful service and energetic help to its members.

On the retirement of Mr. Herbert T. Buckland in 1935 from the post of architect to the Birmingham Education Committee, Mr. Benslyn was selected to fill the post, and, building on the fine tradition set up by Mr. Buckland, Benslyn plunged into the new problems of planning and design he had to meet with his usual fire and zeal and produced a series of outstanding buildings, which again proved his great capacity as a designer of exceptional ability. In view of the enormous requirements for school buildings, brought about by the 1944 Act, Mr. Benslyn relinquished his private practice about two years ago and devoted himself to what he considered to be his call to the service of his country and threw himself wholeheartedly into the vast problems that confronted his office. His ardent spirit was already burning up his bodily strength, and despite doctors' warnings he forged ahead on the programme of Birmingham's new schools and right to the end, despite growing weakness, carried on.

His city has lost a splendid citizen and the profession an outstanding personality, for he was a most skilful planner and accomplished architect, as well as a born administrator and brilliant artist. His architectural works were many and various, all bearing marks of his scholarship and ability. The following are a few of his many works: Hunting-box at Melton Mowbray. Houses in Edgbaston, Four Oaks, Cambridge and Rounds Green. Decorations to St. Paul's Church, Balsall Heath, Birmingham. Reconstruction of Council Offices, Stratford-on-Avon. Cinemas for the Gaumont British Co. at Birmingham, Smethwick, Redditch, Taunton and many other towns. Head Office and Branch Office for the West Bromwich Building Society (in association with J. B. Surman). Schools for the Birmingham Education Committee at York Road, Hall Green, Brearley Street, Ridpool Road, Erdington Cottage Homes, Wheelers Lane, Turves Green, Stechford Road, Stanville Road, Paganel Road, Dorrington Road, Cherry Orchard Road, Calshot Road. Eight or more schools are now in the course of erection. Mr. Benslyn was also responsible for the planning of a number of extensions and improvements to various schools, also pavilions, clinics, groundsmen's houses and for adaptations to provide sixty British Restaurants during the war period, numerous school canteens and kitchens, together with shelter accommodation for over 100,000 children during the war.

Henry Leicester Hicks [*F*] died on 1 December at the age of 65 from heart failure following a sharp attack of bronchitis and asthma. He was born in Newcastle and was very well known as an authority on ecclesiastical architecture in the North of England. Mr. Hicks was President of the North Architectural Association from 1930-1932.

The following notes on his career and work have been received from Mr. G. E. Charlewood, T.D. [*F*] who was in partnership with him from 1920 until 1936 :—

My earliest recollections of my cousin Henry Leicester Hicks, who was about eight years older than myself, was when as a small boy I used to visit my uncle's house and it was a great delight to me to be shown his aviary and reptile house, for in those far off days he was a great student of natural history, a hobby which he kept up throughout the whole of his life.

He was the second son of the late William Searle Hicks, who with my father founded the original firm of Hicks and Charlewood, architects of Newcastle upon Tyne. He entered this firm in 1899 and became a partner in 1907. Like his father, a good designer, Henry Leicester Hicks had a great charm of manner and made friends wherever he went, and although very seriously handicapped throughout the whole of his life by asthma and bronchial trouble, he carried on cheerfully and has left many monuments to his credit throughout the land.

Mr. Hicks designed a number of new churches: among them can be mentioned St. Margaret's Church, Scotswood, St. Augustine's Church, Chesterfield and Holy Cross Church, Fenham, but it was perhaps particularly in his decorative and restoration work that his skill and knowledge as an ecclesiastical architect found its fullest bent. A fine master of decorative detail, his work will remain in many places to testify to his ability and sympathetic touch, while Newcastle Cathedral and many other churches where he carried out restoration work bear witness to his skill.

One of Mr. Hicks' more recent achievements was the remodelling of the naval chapel at the submarine base at Gosport as a memorial to the men of H.M. Submarines who died in the second world war, where he transformed a plain and ugly building into a work of art.

His booklet, *Art in Churches*, was published in 1928 and was widely circulated throughout the Carlisle Diocese where he carried out a large portion of his practice.

Mr. Edwin Thomas Johns [*F*], who died on 11 November, specialized in council schools, and was a well-known figure in Ipswich, where he was surveyor to the Education Committee.

Born in Ipswich in 1862, Mr. Johns was articled to a local architect, James Butterworth, of 6 Museum Street. On Mr. Butterworth's death he entered the office of Brightwen Binyon, who was responsible for Burlington Baptist Chapel and various other local buildings of the active mid-Victorian period. Later he joined William Eade, whose partner he became. In 1922 Mr. Johns took into partnership his nephew, Mr. Martin J. Stater [*A*]. In late life he was President of the Suffolk Association of Architects.

Mr. Johns practised art as well as architecture. He studied at the Ipswich Art School under William T. Griffiths, and he had been identified with the Ipswich Art Club for something like half a century. At the Club's exhibitions his pictures, notable for their accurate drawing and sometimes minute detail, put in with something of the delicacy of the miniaturist, were a feature. He exhibited also at Burlington House. A few years ago Mr. Johns held a 'one-man' show at Tibbenham's Gallery.

Notes and Notices

NOTICES

The Sixth General Meeting, Tuesday 10 February 1948

The Sixth General Meeting of the Session 1947-48 will be held on Tuesday 10 February 1948 at 6 p.m. for the following purposes:

To read the minutes of the Fifth General Meeting held on 27 January 1948.

The President, Sir Lancelot Keay, K.B.E., to present the Medals and Prizes 1948.

Professor Lionel B. Budden, M.A. (L'pool) [*F*] to deliver an address to architectural students.

(Light refreshments will be provided before the meeting.)

The Seventh General Meeting, Tuesday 24 February 1948

The Seventh General Meeting of the Session 1947-48 will be held on Tuesday 24 February 1948 at 6 p.m. for the following purposes:

To read the minutes of the Sixth General Meeting held on 10 February 1948; formally to admit new members attending for the first time since their election.

Mr. M. Hartland Thomas, M.A. [*F*], Chairman of the Architectural Science Board, to read a paper on 'The Influence of Technical Research on Design and Methods of Building'.

(Light refreshments will be provided before the meeting.)

Session 1947-48. Minutes III

At the Third General Meeting of the Session 1947-48 held on Tuesday 9 December 1947 at 6 p.m.

Sir Lancelot Keay, K.B.E., President, in the Chair.

The meeting was attended by about 280 members and guests.

The Minutes of the Second General Meeting held on 25 November 1947 were taken as read, confirmed and signed as correct.

The following members attending for the first time since their election were formally admitted by the President:

AS FELLOWS

E. T. Dowling, R. A. Fitton, I. F. Roberts.

AS ASSOCIATES

M. D. Beasley, C. W. E. Chapman, Mrs. Elizabeth M. K. Curr, Carl Fisher, S. M. Holloway, Miss S. R. Maltby, Miss O. I. Nowell, J. M. Slater, J. D. van der Merwe, John Ware.

AS LICENTIATES

F. J. F. Brooksbank, J. H. M. Francis, Claude Hawks, T. E. Woodrow.

The President announced that the Council proposed to submit to His Majesty the King the name of Monsieur Auguste Perret (France) as a fit recipient of the Royal Gold Medal for 1948.

Mr. John Gloag [*Hon. A*] having read a Paper on 'The Architect's Responsibility for Industrial Design', a discussion ensued, and on the motion of Mr. Gordon Russell,C.B.E., M.C., R.D.I., Director, Council of Industrial Design, seconded by Mr. G. Grey Wornum [*F*], a vote of thanks was passed to Mr. John Gloag by acclamation and was briefly responded to.

The proceedings closed at 8.5 p.m.

Annual Subscriptions and Contributions

Members' subscriptions and Students' contributions for 1948 became due on 1 January. The amounts are as follows:

	£	s.	d.
Fellows	7	7	0
Associates	4	4	0
Licentiates	4	4	0
Students	1	11	6

For members resident in the trans-oceanic dominions who are members of Allied Societies in those dominions, and for members resident overseas in areas where no Allied Society is available, the amounts are as follows:

	£	s.	d.
Fellows	4	4	0
Associates	3	3	0
Licentiates	3	3	0

Cessation of Membership
Under the provisions of Bye-law 21 the following have ceased to be members of the Royal Institute:
As Fellow. Edward Arnold Mitchell.
As Associate. James Ellaby Rhind.
As Licentiate. Orlando Edward Thomas Prescott.

Exhibition of Prize Drawings
The Exhibition of Designs and Drawings submitted for the Prizes and Studentships 1948 will remain open until 11 February between the hours of 10 a.m. and 7 p.m. (Saturdays 10 a.m. and 5 p.m.)

The Use of Tiles by Members of the Royal Institute
In view of the passing of the Architects Registration Act 1938, members whose names are on the Statutory Register are advised to make use simply of the title 'Chartered Architects' after the R.I.B.A. affix. The description 'Registered Architect' is no longer necessary.

The Reception of New Members at General Meetings
The procedure for the introduction and reception of new members at General Meetings is now as follows. New members will be asked to notify the Secretary beforehand of the date of the General Meeting at which they desire to be introduced, and a printed postcard will be sent to each newly elected member for this purpose. They will be asked to take their seats on arrival in a special row of seats reserved and marked for them. At the beginning of the meeting, on the invitation being given to present themselves for formal admission, each new member will be led up to the Chairman by one supporter, and the Chairman will formally admit him to membership.

The introduction and reception of new members will take place at any of the Ordinary General Meetings of the Royal Institute *with the exception of the meetings on the following dates:*
10 February 1948, Presentation of Medals and Prizes.
6 April 1948, Presentation of Royal Gold Medal.

British Architects' Conference, Liverpool, 27-30 May 1948
The next Annual Conference of the R.I.B.A. and its Allied and Associated Societies will be held in Liverpool from 27 to 30 May 1948 inclusive, in conjunction with the Centenary Celebrations of the Liverpool Architectural Society. Particulars of the programme will be issued in due course, and the application form for membership of the Conference will be sent to members with the March issue of the JOURNAL.

It is expected that there will be a large attendance of members from all parts of the country, and they are advised to arrange their hotel accommodation at the earliest possible moment, to avoid the risk of disappointment.

The Executive Committee of the Conference have furnished the list of hotels in and around Liverpool published below.

The Next A.S.B. Lecture at the R.I.B.A.
Tuesday 3 February at 6 p.m., '*The Effect of Services on Planning and Design*', by Mr. H. G. Goddard [*F*].

SYNOPSIS

(1) A consideration of the history of 'Services' and their effect on planning and design in bygone times.

(2) The sociological and industrial changes of recent years and the demands for improvements which they have brought in their train. The part of the architect in ensuring that such demands are satisfied.

(3) The scope of an architect's knowledge of engineering as applied to 'Services' in a building. His relationship to the specialist engineer and his part in deciding upon equipment to be used.

(4) A consideration of modern developments and their effects in this country, including a review of various types of buildings having their own specialized requirements, e.g. Domestic Buildings, Public Buildings, Offices, Schools, Factories. The way in which legal requirements affect the issue.

(5) A consideration of the effect of modern development in 'Services' in other countries

(6) The way in which provision of public services may affect town planning schemes and the siting of individual buildings, with particular reference to district heating and the disposal of solid refuse.

(7) Conclusion. The importance of coming to an early decision as to the equipment to be used, whether in a single building or a large scheme, in order that it may not be in the nature of an afterthought, full of disappointment and expense.

R.I.B.A. Exhibition on Housing Layout
In the Summer of this year it is proposed to hold a conference and exhibition at the Royal Institute on 'Housing Layout in Theory and Practice'. Full details of the conference and the arrangements for the application of tickets will be announced in due course. In the meantime, if members would be kind enough not to write to or approach the Institute asking for further details, it would be much appreciated.

The exhibition will be on the same scale as the exhibition which accompanied the Schools Conference. It will be limited in size and therefore in scope. It is intended to stress both the three dimensional aspects of housing layout and the problems of neighbourhood planning, and to show schemes grouped under the following headings: (1) Rural housing schemes; (2) Additions to existing development in urban areas; (3) Development of new neighbourhood units; (4) Development of neighbourhood units in built up areas.

The Housing Committee, in collaboration with the Exhibition Sub-Committee, will be responsible for the exhibition. They are anxious that those architects who have material suitable for inclusion in the exhibition should submit it to them as soon as possible, and in any case not later than 14 February. The following points may be of assistance to architects when submitting material:

(1) It is the intention of the Housing Committee to give preference to post-war schemes, both projects and completed jobs. It will be necessary, however, to show some inter-war schemes to illustrate particular points, and a few such schemes will be eligible.

(2) Architects will appreciate that material submitted in the first instance will be on a tentative basis, and they should not, therefore, go to the trouble of preparing the special plans and drawings which will ultimately be required for the exhibition. Prints of working drawings will be adequate. Once, however, a particular scheme has been selected, then the Housing Committee may have to ask architects submitting material to prepare special plans as was done in the case of the recent Schools Exhibition.

(3) The Committee are anxious to obtain for the final exhibition as many models or photographs of models as possible, and in the first instance it would be most helpful if architects could submit photographs of models where they exist.

(4) Particular attention will be given to schemes which have not yet been published in the architectural papers. When submitting material, architects should indicate if schemes have not been published.

(5) Plans, drawings and illustrations of houses or flats are not eligible for this exhibition, which is intended to illustrate housing layout only.

(6) Architects are asked not to submit any material which they might require urgently for

British Architects' Conference, Liverpool, Hotel Accommodation.

	ROOMS			TARIFF			Mins. from Conference Hqrs.
	With double beds	With twin beds	With single beds	Bed and breakfast double	Bed and breakfast single	Full daily per person	
LIVERPOOL							
Adelphi Hotel	—	50	25	40/–	21/–	—	3
Exchange Hotel	—	10	—	34/6	—	—	7
Hanover Hotel, Hanover Street	—	—	6	—	13/9	22/–	5
Shaftesbury Hotel, Mount Pleasant	3	—	6	25/–	12/6	—	5
BIRKENHEAD							
Central Hotel, Clifton Crescent	2	—	4	20/–	11/–	—	15
NEW BRIGHTON							
Grand Hotel, Marine Promenade	8	4	1	31/–	15/6	25/–	30
Victoria Hotel	—	6	6	35/–	17/6	25/–	30
Sandrock Hotel, Rowson Street	15	—	7	21/–	10/6	—	30
Rock Point Hotel, Marine Promenade	14	—	3	25/–	12/6	18/6	30
BLUNDELLSANDS							
Blundellsands Hotel, Liverpool, 23	—	2	2	35/–	17/6	25/–	30
HOYLAKE							
King's Gap Court Hotel, Wirral	—	3	1	—	—	23/6	35
*Green Lodge Hotel	—	—	—	—	—	21/–	40
Royal (Golf) Hotel, Stanley Road	4	8	3	30/–	15/–	25/–	35
SOUTHPORT							
Hoghton House, 54 Hoghton Street	—	2	1	—	—	17/6	60
Orleans Private Hotel, 8 Lathom Road	1	3	—	—	—	22/–	60
Eyredene Private Hotel, 8 Knowsley Road	3	5	4	—	—	21/–	60
*Silverdale Private Hotel, 12 Bank Square	2	—	1	21/–	10/6	15/–	60
Scarisbrick Hotel, Lord Street	4	4	4	—	—	25/–	60
CHESTER							
Grosvenor Hotel	10	—	—	43/–	—	33/–	80

*The Green Lodge Hotel, Hoylake, has two rooms with one double and one single bed, and the Silverdale Private Hotel, Southport, six.

another purpose, as a request to return immediately material which has been submitted for selection may seriously interfere with the work of the Committee. Copies of plans, rough proofs of photographs, etc., will be quite adequate in the first instance.

(7) No large mounted drawings should be submitted owing to difficulties of transport and storage, and no drawings in frames of any kind can be accepted.

(8) Perspectives are not eligible.

(9) All packages must be clearly labelled 'Housing Committee, Exhibition', R.I.B.A., 66 Portland Place, London, W.1, and should *reach the Institute not later than* 14 *February*.

(10) The Committee can not undertake to guarantee the return of any work submitted until after the Conference, but will try to return material not required for the exhibition as soon as they can.

ALLIED SOCIETIES

Norfolk and Norwich Association of Architects

No body of men ever had such an opportunity in their hands as architects had today, declared the President, Sir Lancelot Keay, K.B.E., when he addressed members of the Norfolk and Norwich Association of Architects at Norwich on 5 December. The President said that travelling through England by train and looking at the backs of towns as seen from a railway carriage he asked himself: 'Need they have been as terrible as that?'

Reminiscing on the days when he served his articles in the City of Norwich Architectural Department, of which he afterwards became head, the President said that The Close in Norwich, where he used to spend every lunch hour walking round, had left an indelible mark in his mind of what was most desirable for architectural beauty and serenity.

Having referred to some of the other architectural treasures of Norwich and Norfolk he said: 'How fortunate you are here!' The people of East Anglia were trustees of a great heritage.

Of trends in architecture, the President said the outlook was a little disturbing, but the present period could usefully be employed to educate people to understand the things which architects understood. In striving for something quite different architecturally, there was a danger of going to the other extreme and producing 'a thing without emotion'. Those who looked to the future should always remember the past. So would emerge a gradual process of evolution which would produce something of which to be proud.

Referring to the loss of craftsmanship, Sir Lancelot said: 'We have lost the driving force of something behind us that our predecessors possessed—the pure love of craftsmanship'.

The President of the Norfolk and Norwich Association (Mr. A. G. Berry [*F*]), who presided, said they had some indication of Sir Lancelot's continued interest in East Anglia by the great fight he had put up for them in their endeavours to preserve the South Quay at Yarmouth.

Mr. A. B. Whittingham [*A*] moved a vote of thanks to the President, and this was seconded by Mr. S. J. Wearing [*F*].

The Secretary, Mr. C. D. Spragg, spoke briefly on the work of the Institute at the invitation of the Chairman.

South Eastern Society of Architects, Tunbridge Wells Chapter. Activities of the Maidstone Group

This Group was formed in March 1947, resultant upon a desire to have something more local than the Tunbridge Wells Chapter to meet the needs of architects living in and practising in and around Maidstone. The following officers were appointed: *Chairman:* Mr. L. Mason Apps [*A*]. *Secretary:* Mr. G. E. Soulsby. *Committee:* Messrs. Bidwell, Poltock, Reeve, Ward and Worthington. Student member, Mr. G. A. Waters.

Lectures: Lectures have been arranged and held as follows:

April. 'Glass—its uses in building,' by J. M. Holt, of Pilkingtons.

May. 'Lighting,' by A. B. Read, R.D.I., A.R.C.A., of the 'Lighting Centre'.

June. 'Manufacture of window glass,' by J. M. Holt.

October. 'Planning of large-scale kitchens,' by J. C. Morris, of Benhams.

November. 'Timber—its properties, defects, preservation and uses,' by E. H. B. Boulton, of the T.D.A.

December. 'Making good concrete,' by J. Singleton-Green, M.Sc., A.M.I.C.E., of the Cement Marketing Company.

All the lectures have been public in the sense that interested friends have been invited. Liaison has been made with the Maidstone Master Builders' Association, the Kent Education Committee, the Maidstone Art Club, and the Art and Technical Schools at Maidstone and Rochester.

The lectures were held in the Maidstone Technical Institute by kind permission of Mr. H. Collins, B.Sc., the Principal.

In addition, a less formal lecture was given to members only on 29 November at the Royal Star Hotel, Maidstone, by Mr. Richard Henniker, M.A., on the subject, 'The architect and the public'. Although disappointment was expressed at the small attendance at this last meeting, the contribution to the discussion by Mr. Henniker and Mr. Knapp Fisher was much appreciated. It was felt that a valuable contact had been made with the R.I.B.A., and if interest can be aroused locally, further talks will be arranged by courtesy of the Lectures Committee of the Institute.

Visits. The following visits to places of interest have been paid during the year:

June. Scotney Castle, Lamberhurst. A most interesting afternoon, spoiled only by inclement weather. About 40 members and friends present.

July. Rochester Cathedral. A most interesting visit too, but poorly supported. Canon Wheatley conducted the party over the Cathedral.

November. Houses of Parliament. About 50 members and friends were conducted over the Palace of Westminster by the Patron of the Group, Mr. Alfred Bossom, M.P., J.P. [*F*].

Annual Meeting. The Annual Meeting of the Group was held on Wednesday 14 January 1948 at the Royal Star Hotel, Maidstone.

Numbers. Nearly 70 Members, Associate Members and Student Members of the South-Eastern Society are on the lists in the hands of the Secretary. These members are circularized regularly. The lectures are being well attended now, but in June only 24 members and friends attended.

Derby School of Transport Architectural Award

A plaque commemorating the award to the L.M.S. Railway's Derby School of Transport, of the Nottingham, Derby and Lincoln Architectural Society's bronze medallion for the best building erected in the three counties between 1937 and 1946, was officially unveiled on 4 December 1947 by Sir Robert Burrows, Chairman of the L.M.S., who paid tribute to Mr. W. H. Hamlyn, the company's architect who designed the building, and said the award would stimulate Mr. Hamlyn and his assistant, Dr. Martin, to further successes in the many schemes they had in hand for the L.M.S. The ceremony was attended by the Mayor of Derby, Mr. C. F. Martin, Vice-President R.I.B.A., and Mr. R. E. M. Coombes, President of the Nottingham, Derby and Lincoln Architectural Society.

Changes of Officers and Addresses

Royal Victorian Institute of Architects. President: Mr. W. Race Godfrey, 375 Collins Street, Melbourne C.I., Australia.

South Australian Institute of Architects. President: Mr. J. R. S. Evans, M.C., c/o D. W. Berry, Trustee Building, Grenfell Street, Adelaide, South Australia.

The Royal Australian Institute of Architects: President, Mr. T. B. F. Gargett, Messrs. A. H. Conrad and T. B. F. Gargett, Commerce House, Adelaide Street, Brisbane, Queensland.

COMPETITIONS

New Memorial Building at Great Russell Street, W.C.1, for the T.U.C.

The General Council of the Trades Union Congress invite architects of British nationality, or architects resident in this country, to submit designs in competition for the T.U.C. Memorial Building, which they propose to erect on a site in Great Russell Street, London.

Assessor: Sir Percy Thomas, O.B.E., Hon. LL.D., P.P.R.I.B.A.

Premiums: £2,000, £1,000 and £500.

Last day for submitting designs: 31 May 1948.

Conditions may be obtained on application to the General Secretary, Trades Union Congress, Smith Square, London, S.W.1.

Deposit: £2 2s.

The Royal National Eisteddfod of Wales 1948: Two Architectural Competitions

Competition 192 is for a county college.

Competition 193 is for a lay-out for a neighbourhood unit.

Assessors: Mr. C. F. Bates [*F*] and Mr. T. Alwyn Lloyd [*F*].

Premium in each competition: £50.

Last day for submitting designs: 14 June 1948.

Conditions may be obtained on application to the Rev. W. J. Samuel, General Secretary, The Royal National Eisteddfod of Wales, Victoria House, 38 Dunraven Place, Bridgend.

GENERAL NOTES

Architectural Association Scholarships in Architecture

The Council of the Architectural Association offers the following scholarships in Architecture:

ENTRANCE SCHOLARSHIPS

The Leverhulme Scholarship. Value £200 per annum.

The Minter Open Entrance Scholarship. Value £90.

The Sir Walter Lawrence Open Entrance Scholarship. Value £90.

The Metal Window Scholarship (presented by The British Metal Window Manufacturers' Assoc. Ltd.). Value £75 per annum. The Natural Asphalte Council Scholarship (presented by The Natural Asphalte Mine-Owners and Manufacturers' Council). Value £50 per annum.

The Northern Aluminium Scholarship (presented by The Northern Aluminium Company). Value £50 per annum.

The Patent Glazing Scholarship (presented by The Patent Glazing Conference). Value £50 per annum.

These Scholarships, which are tenable for Five Years at the A. A. School of Architecture, will be available to students of British

nationality. They will be awarded for one year, with the intention that they shall be renewed from year to year until the student has completed the course; renewal being subject to a satisfactory report of the student's progress, and to proof of the continued need for such assistance.

SENIOR ENTRANCE SCHOLARSHIP

The Metal Window Senior Scholarship (presented by The British Metal Window Manufacturers' Assoc., Ltd.). Value £50 per annum.

This Scholarship, which is tenable for two years at the A. A. School of Architecture, is open to students of British nationality, who have passed the Intermediate Examination of the R.I.B.A., either externally, or at another Recognized School of Architecture, and is for entry to the Fourth Year of the course, and subject to satisfactory progress by the student, will be renewed for the Fifth Year.

Full particulars and forms of application may be obtained from the Secretary of the Architectural Association, 36 Bedford Square, London, W.C.1, and forms of application should be received not later than 1 April 1948, and for the Leverhulme Scholarship not later than 1 June 1948.

Herbert Baker Scholarships

The Royal Academy is considering the award of Scholarships under the terms of the bequest of the late Sir Herbert Baker, K.C.I.E., R.A., and invites young practitioners of the arts who wish to be considered for election to the Scholarships to submit their names, ages, qualifications and aims to the Secretary, Royal Academy of Arts, Piccadilly, London, W.1, not later than 1 March 1948.

The purpose of the Herbert Baker Scholarships is to promote the study of the interdependence of Architecture, Sculpture, Painting and Poetic Literature. These Scholarships, of the value of £250, are open to advanced students and young practitioners of the arts in Great Britain, Northern Ireland and the Dominions (including Rhodesia and Kenya) of the British Commonwealth.

The Late Mr. W. Bernard Perks

By the death of Mr. Bernard W. Perks, general manager and executive director of THE BUILDER, the building industry has lost a well-loved personality. Mr. Perks was lunching at the Building Exhibition on 3 December when he collapsed and died without regaining consciousness. He was sixty-two.

Mr. Perks was appointed general manager of THE BUILDER in 1913 and it was largely due to his efforts that the journal weathered the storm during the 1914-18 war. His business ability and shrewdness were combined with a great kindliness of heart and there are many in the industry who have cause to thank him for help. No man's sympathy was easier to enlist in a good cause.

Retirement of Mr. William Stukins

Mr. William Stukins, who has been with the Cement Marketing Company for the past sixteen years and who is well known to many architects, has retired. With twenty-eight years service in the cement industry, Mr. Stukins has always placed his great knowledge at the disposal of architects; they will wish him well in his retirement.

The Royal Sanitary Institute

A discussion on 'House Refuse: Improved Methods of Collection and Disposal' is to be held at the Institute, 90 Buckingham Palace Road, S.W.1, on 11 February at 2.30 p.m. It will be opened by Mr. R. A. H. Livett, O.B.E. [*A*], City Architect, Leeds, who will deal mainly with the Garchey System, and by Mr. W. H. Price, M.B.E., Cleansing Superintendent, East Ham.

Notes from the Minutes of the Council

MEETING HELD ON 9 DECEMBER 1947

Appointments:

Council for the Preservation of Rural England: R.I.B.A. Representative: Mr. Henry Braddock [*A*] in place of the late Mr. John Dower [*F*].

Codes of Practice Committee, Load-bearing Structures: R.I.B.A. Representative: Mr. Thomas Ritchie [*F*] in place of the late Mr. James Saunders [*F*].

Royal Sanitary Institute: Health Congress, Harrogate, 24-28 May 1948: R.I.B.A. Delegate: Mr. Norval R. Paxton [*F*].

The Honorary Fellowship: The Secretary reported that the following had accepted the Council's nomination for election to the Honorary Fellowship: Field-Marshal the Right Hon. Earl Wavell, G.C.B., G.C.S.I., G.C.I.E., C.M.G., M.C.; the Right Hon. Lord Macmillan, G.C.V.O. [*Hon. A*].

The Honorary Associateship: The Secretary reported that the following had accepted the Council's nomination for election to the Honorary Associateship: Sir David Lindsay Keir, M.A., LL.D., Mr. Henry Moore, Mr. Ronald Collet Norman, Mr. Henry Rushbury, R.A.

Gift Parcels: The Council record with deep appreciation the generous action of the Royal Australian Institute of Architects in arranging to send some 500 gift parcels of food to architects and their dependants in the United Kingdom.

The Council also record with gratitude the generous action of the South Australian Institute of Architects in arranging to send gift parcels to 100 architects in the United Kingdom.

R.I.B.A. Distinction in Town Planning: The Council have conferred the award of the R.I.B.A. Distinction in Town Planning upon the following members: Sir Lancelot Keay, K.B.E., President; Mr. Henry Braddock [*A*]; Mr. John L. Denman [*F*]; Mr. C. H. James, R.A., Vice-President; Mr. S. Rowland Pierce [*F*].

Membership: The following members were elected: as Honorary Fellow, 1; as Fellows, 7; as Associates, 282; as Licentiates, 22.

Applications for Election: Applications for election were approved as follows: *Election* 10 *February* 1948: as Fellows, 5; as Associates, 41; as Licentiates, 14. *Election* 4 *May* 1948—*Overseas Candidates*: as Fellow, 1; as Associates, 9.

Students: 117 probationers were elected as Students.

Applications for Reinstatement: The following applications were approved: as Associates: Richard Fielding Farrar, Daniel Joseph MacRandal.

Resignations: The following resignations were accepted with regret: Mrs. Elizabeth Mary Bertram [*A*], Francis William Mudd [*A*], Stanley Brame Elphick [*L*], Wilfred Henry Loft [*L*].

Applications for Transfer to Retired Members' Class under Bye-law 15: The following applications were approved: as Retired Fellows, Arthur Cecil Fare, Allen Foxley; as Retired Associate, Richard Fielding Farrar; as Retired Licentiate, Harold Gibson Walker.

Obituary: The Secretary reported with regret the death of the following members:

William Thomas Benslyn, A.R.C.A. [*F*].
Mr. Benslyn was Godwin Bursar 1923. He was a former President of the Birmingham and Five Counties Architectural Association, and had represented that body on the Council and the Allied Societies' Conference. He was also a former member of the Science Standing Committee.

James Davidson Cairns [*F*].

John Daniel Clarke [*F*].

Henry Leicester Hicks [*F*].
Mr. Hicks was a former President of the Northern Architectural Association and had represented that body on the Council and the Allied Societies' Conference.

Ernest Edward Kemeys-Jenkin, J.P. [*F*].
Mr. Kemeys-Jenkin was a former President of the Devon and Cornwall Architectural Society and had represented that body on the Council and the Allied Societies' Conference.

James Miller, R.S.A., F.R.S.E. [*F*].

Ernest Grigg Heathcote [*Retd. F*].

Edwin Thomas Johns [*Retd. F*].
Mr. Johns was a former President of the East Anglian Society of Architects, and had represented that body on the Council and the Allied Societies' Conference.

Arthur Charles Elliott [*A*].

Charles Laurence Clarson, M.C. [*L*].

Arthur Needham [*L*].

Arthur Benjamin Packham [*Retd. L*].

Membership Lists

ELECTION: 9 DECEMBER 1947

The following candidates for membership were elected on 9 December 1947:

AS HONORARY FELLOW (1)

H.R.H. The Princess Elizabeth.

AS FELLOWS (7)

Allen: Alfred Maxwell, Durban, South Africa.
Fairtlough: Andrew Charles [*A* 1938].
Mollison: William [*A* 1931].
Moncrieff: Harry [*A* 1932].
Oldacre: William Bernard [*A* 1926], Newcastle-under-Lyme.
Winston: Denis, M.A., B.Arch (L'pool), M.T.P.I. [*A* 1932], Southampton.
And the following Licentiate who has passed the qualifying Examination:
Humphrys: Derrick Raymond.

AS ASSOCIATES (282)

Adams: Ernest George Young.
Adams: George Robert, D.F.C.
Alderson: Joan Lorna (Mrs.), Manchester.
Allen: Frances Evelyn (Miss).
Altham: Charles Joseph, Buxton.
Anderson: Robert.
Atkinson: Harry Hartley, B.Arch. (Durham), Newcastle-on-Tyne.
Baldwin: Thomas Allan.
Balkwill: Roger Lanyon.
Ball: Kenneth James, Chesterfield.
Bancroft: Bernard.

Bardsley: Geoffrey, Dip.Arch. (Manchester).
Barker: John Stanley, B.A. (Hons. Arch.) Manchester.
Barlow: Edward Ernest (Major).
Barrow: William Leslie, Bristol.
Barry: Patrick Hayden, Bristol.
Bartholomew: Victor Graham (Capt.), A.R.I.C.S.
Beech: Gerald Rushworth, Liverpool.
Bellamy: Ivan Montagu.
Betts: Joseph Herbert.
Bidmead: Rowland John, Stafford.
Bishop: Harold Charles.
Boddington: Geoffrey Duncan, Chelford, Cheshire.
Bond: Rupert Henry, Liverpool.
Bonella: Gordon Raphael.
Borrell: Edward Harley, Newcastle-on-Tyne.
Bowes: Joseph, Barrow-in-Furness.
Brewins: Cyril Dunford, Wakefield.
Brooke: Mary (Miss), Ossett, Yorks.
Brooks: Emily Kathleen (Miss).
Broome: John Sommers.
Brown: Arthur Osmond.
Brown: Henry Faulkner, M.C.
Brown: James Harry Chaplin, Manchester.
Brown: Richard, M.C., B.Arch. (Durham), Ferryhill, Co. Durham.
Brown: Thomas.
Buckler: Derek, Rugby.
Bunn: John Tennant, Nottingham.
Burnett: Alexander Harvey.
Burns: John Dominic Delisle.
Busbridge: Pauline (Miss), Worsley, Lancs.
Bush: David.
Butler-Bowdon: Anthony William.
Cameron: Charles Norman, Elgin.
Carline: Thomas Hallam, B.Arch. Hons. (L'pool), Wirral.
Carter: John Leslie, Worcester.
Carver: Owen Philip [*L*].
Castle Cleary: William Robert.
Cavanagh: Edmund John, Oxford.
Cave-Browne-Cave: Lyndon Fraser, Dip. Arch. (L'pool), Rhyl, Flintshire.
Cawkwell: Sheilah Margaret (Miss), Sheffield.
Challis: Derrick Peter.
Champion: Marjorie Maureen (Miss).
Clarke: Edward Anthony, Cirencester, Glos.
Clayton: Douglas Charles.
Cocker: John Charles, B.A. (Hons. Arch.), (Manc'r), Altrincham.
Connelly: Raymond Lloyd, Pontefract.
Cook: Claude Oliver James.
Cooper: Lyndon Clappison.
Cordiner: Norman Case, Aberdeen.
Coughlan: Neville Gent, Newcastle-under-Lyme.
Coutts: David Hutcheon, Perth, Scotland.
Cox: Neville Hilton, Halifax.
Crocker: Montague Ernest, Bristol.
Crowther: John.
Cundall: Diana Olive (Miss).
Cuthill: Edmund Robertson (Junior), Broughty Ferry.
Cutler: Anthony Thraves.

Dakin: Arthur John, Bristol.
Date: Patrick.
Davies: David Charles Glyn, Berriew, Montgomeryshire.
Davies: William Roger.
Davis: Robert Howard Holmes, B.Arch. (L'pool), Altrincham.
Denby: Elaine Coventry (Miss).
Dickson: Frederick William, Exeter.
Dickson: Jean Purvis (Mrs.).
Dixon: Arthur Augustus, Edinburgh.
Doak: Archibald Macintosh, Greenock.
Doig: William Inglis Norman Gordon, Auchenblae, Kincardineshire.
Double: Robert James.
Drinkwater: Norman (Major), Plymouth.
Duckett: Hugh, Bristol.
Dunton: George William
Duthie: Robert Patrick, Aberdeen.
East: Francis John, Nottingham.
Eckersley: Henry, Nottingham.
Ellery: Harold James.
Farrar: John, Blackpool.
Ferguson: Peter Scott, Edinburgh.
Ferrari: Silvio Joseph.
Field: Bryan Peter.
Findlater: George Robertson, Sunderland.
Fletcher: Doreen Wilshire (Miss), B.A. (Hons. Arch.) (Manchester), Heanor.
Fletcher: Dorothy Mary (Miss), Stockport.
Forbes: John Mack, Burnley.
Forbes: Nina Lillias (Miss), Kirkcaldy.
Fox: Leslie Philip John.
Freeman: Roger.
Garrett: Rodney Colston.
Gatoff: Maurice, Newcastle-upon-Tyne.
Geach: Antony Douglas.
Germaney: Robert William.
Gilbert: Bertram Hiller, Cape, South Africa.
Gomersall: Eric, Chester.
Goodbody: Hugh Nicholson, Lisnagry, Co. Limerick.
Goody: Daniel George, Cardiff.
Gray: Petronella (Miss), B.A. (Hons. Arch.) (Manchester), Manchester.
Greatrex: Rolland Ivor.
Grierson: Inette Lotte Edith (Miss).
Grimes: James William Pleasant.
Gwilliam: John Gilbert, Barry, Glam.

Hall: Ruthven Oliphant.
Hargreaves: Harry.
Harris: Norval John Hayns, Sheffield.
Harrison: Muriel Eugenie (Miss).
Harrison: Peter Horn, B.A. (Manchester), Manchester.
Harvey: Eric Gordon, Barry, Glam.
Hawkins: Seymour Basil Peel.
Haydon: George Charles, Norwich.
Hayes: Thomas Ralph, Nottingham.
Heatley: Margaret Evelyn (Miss), Eccles.
Henderson: John Eversdon, Juniper Green, Midlothian.
Heppell: Stuart Alan Bulmer, Preston.
Hillson: William Rodney.
Holder: Neville Ernest Amphlett.
Hollingworth: Harry, Dukinfield, Cheshire.
Hopkins: Thomas Henry George.
Horton: Ronald William, York.
Howard: Albert Victor, Leicester.
Howie: Francis Morrison, Aberdeen.
Howorth: John Francis.
Hughes: Arthur Gordon.

Ibrahim: Austin, Sheffield.

Jarrett: Claude Stephan (Capt.).
Jenks: Alan Seymour, B.Arch. (Rand), Johannesburg, South Africa.
Jennings: Arthur John Rackham.
Johnson: Frank Percival, Chester.
Johnson: Gerald Arthur, Shipley.
Kerr: Francis Archibald, Eccles.
Kidall: Joseph Monson.
Kiersey: Kenneth, B.Arch., Monkstown, Co. Dublin.
Knight: Victor Clarence Henry.
Knott: Ronald Frank.
Laing: Anthony Robert.
Laver: Arthur Haswell, Newcastle-on-Tyne.
Lawrence: John Anthony.
Leach: Robert Herbert, Birmingham.
Lees: William Percival, Uttoxeter.
Leonard-Williams: David Haigh, Plympton.
Leopard: Gordon Charles, Whitchurch, Glam.
Lewis: Hubert Roy.
Linssen: Simonne Louise Pierre (Miss).
Linstrum: Fred Derek, Dip.Arch. (Leeds), Leeds.
Litherland: Sydney, Norwich.
Locke: George Somme Kitchener, Nottingham.
Lockerbie: James Nisbet, Edinburgh.
Lovell: John Dennis, Edinburgh.
Lusty: Raymond Charles.
MacDonald: Eric Wray, B.Arch.Hons. (L'pool), Portobello.
McDool: Anthony Robert, B.A. (Hons. (Sheffield), Rotherham.
McKay: John Kenneth, B.A. (Hons. Arch. (Manchester), Manchester.
Mackellar: Robert Norman, M.B.E., B.Arch., Newcastle-upon-Tyne.
Makins: Thomas Kenneth.
Malkin: Henry Frank.
Mann: Maurice Jack.
Maples: Mary Chauncy (Miss).
Mason: Frank Lionel.
Mason: Joan Margaret (Miss), Helensburgh.
Matthews: Derek Howard.
Matthews: John Anthony, Weston-super-Mare.
Matthews: Leslie Bruce.
Miller: Eric Vernon, Birmingham.
Mimmack: Maxwell Alfred, M.B.E., Washington, Co. Durham.
Mitchell: Malcolm David, Harrogate.
Moate: Frank.
Moira: Alexander Philip.
Moreton: John Basil Elias, B.Arch (Hons. (L'pool), Llangollen, Denbighshire.
Morgan: Bernard George, B.Arch Hons. (L'pool), Llandudno.
Morgan: James Cecil, Birkenhead.
Mort: William Idwal, Wrexham.
Mortimer: Elizabeth Grant (Mrs.), Dip.Arch. (Leeds), York.
Munro: Ian Archibald, Inverness.
Murray: John Thomas, Rossendale.

Naglovsky: Alexander.
Naylor: Olga Mary Wilson (Miss), B.A. (Sheffield), Sheffield.
Neale: Peter Walter James, M.C., Birmingham.
Neil: Robert.
Newman: Stanley Ashley, Dip.Arch.(Lond.) Dip.T.P.(Lond.).
Nichol: Richard James.
Norfolk: Derek Evelyn Whiteway.

Oates: John Rollinson (Major), Dip.Arch. (Sheffield), Worksop.
Oldfield: Peter Lawrence, B.Arch.(L'pool).
O'Neill: Vincent Hilary, Dublin.
Owen: Alice Elizabeth Pamela (Miss).

Parker: William James.
Parsons: Howard Christopher, Yatton, Somerset.
Partington: Richard Scott, Bolton.
Paterson: James, Edinburgh.
Patience: Maurice Balfour, Sheffield.
Paul: Ernest Henry.
Peake: Basil Maxwell.
Pearson: John Henry, Middlesbrough.
Pepperell: David Garth, Bristol.
Pethybridge: Robert Edward.
Phillips: Leonard William Charles.
Pite: Frederick Robert.
Platt: Geoffrey Parker, Manchester.
Pollitt: Eric, Wallasey.
Powell: Patrick John Lowry.
Price: Arthur Gwynne, Rhondda.
Price: John Montague Pembroke.
Prichard: Victor Henry Sydney, Taunton.
Prower: Aubrey Edward.
Pryce: Margaret Eleanor (Miss).
Purser: John.

Ramsay: James.
Ramsbottom: Denis Hannibal, Accrington.
Reade: Edna Eileen (Mrs.), B.A.(Hons.Arch.), Manchester.
Riley: Eric William.
Roberts: Owen Nedwill, B.Arch.(Hons.) (L'pool), Liverpool.
Roberts: Ruth Mary (Mrs.).
Robertson: Neil McLeod, East Boldon, Co. Durham.
Robinson: Alfred William.
Robinson: Douglas Varley, Keighley.

Robinson: Neil Gunn, Dip.Arch.(L'pool), Wirral.
Rodd: Margaret Janet (Miss).
Rothen: Gordon Eric, B.A.(Arch.).
Sawyer: Peter Ross (Lt.-Col.), M.C., T.D., Winchester.
Scollay: Edward John.
Scott: Constance Brough (Miss), Aberdeen.
Shepherd: Alexander, Auchtermuchty.
Smith: Edward Watson, Durham City.
Smith: Roger Gordon.
Smith: Ronald Victor Robert.
Smithson: Peter Denham, Stockton-on-Tees.
Soulsby: George Ernest.
Southey: Frank Lester.
Stansfield: John Cameron Oddy, York.
Stillman: John Cecil.
Stroud: Harry Augustus.
Swain: Paul Bryan O'Brien, Jersey, C.I.
Swann: Peter William.
Swift: Stanley, Leamington Spa.
Sykes: Leslie Ernest, Manchester.
Symes: John Jeffrey, Isle of Wight.
Taylor: John Spencer, Dip.Arch.(Manc.), Todmorden.
Taylor: Kenneth Royle, Manchester.
Tempest: Ronald, Leeds.
Terry: John Hankinson, Fishguard.
Tomlin: Elizabeth Catherine (Miss), Dip.Arch. (Manc.), Manchester.
Tucker: Ernest Frank, Plymstock.
Van der Steen: Joseph William.
Variava: Dara Rustomji, Manchester.
Vere: Stanley, Birkenhead.
Vernon: Russell Geoffrey Duddell, M.B.E.
Versino: Andrea George.
Villar: Pamela Mary (Miss), Southampton.
Vint: George Branwell.
Vinycomb: June Hilaby (Miss).
Walker: Denis Vivan Campbell.
Walker: James Reginald, Heckmondwike.
Ward: Ian Dorrington.
Watson: Alexander.
Watson: Alexander, Edinburgh.
Weaver: Edward Harry.
Weinmann: Gunter Alfred.
Whiffen: Robert Flury.
Whitfield: Kenneth Waltham, Liverpool.
Whittle: John Parkinson, B.A.(Hons. Arch.). Blackburn.
Wightman: Henry Hunter, Auchterarder.
Wilcox: Beresford Maurice.
Williams: Dilwyn Christopher, Bridgend.
Williams: Harry, Llangollen.
Williams: John Stanley, Manchester.
Williams: William Thomas.
Wilson: Bernard, Wallasey.
Wilson: Doreen Eva Margaret (Miss), Newcastle-on-Tyne.
Wills: Samuel Kennedy, Dip.Arch.(Manc.), Carrickfergus, Co. Antrim.
Wood: Cyril Raymond Meldrum, Belfast.
Woods: Roy, Burton-on-Trent.
Wright: Isoult de Valence (Miss).
Zegleman: Hyam, Glasgow.

AS LICENTIATES (22)

Baines: Edwin Roy.
Banks: Edward Harry.
Bevan: Geoffrey, Wrexham.
Bradshaw: Leonard Robert.
Clements: Arthur Palmer, Leicester.
Clunie: William Lambie, Sheffield.
Illingworth: Marcus Stewart (Capt. R.E.), Kettering.
Illingworth: William Douglas (Capt.), F.R.I.C.S., Bradford.
Jolly: George James.
Kettlewell: William Clifford, Leeds.
Konrad: Joseph, Hull.
Miller: Albert Lenis, Pontypool.
Page: James, Birmingham.
Palmer: Norman, Ipswich.
Palmer: Ralph Colchester.
Pearce: Harold.
Rowland: Gordon Arthur George.
Saunders: George Gerald Girling, Exeter.
Speed: Cecil John, Portsmouth.
Thomas: Lionel Willoughby.
Vaughan: Richard Field Gilbert, Exeter.
Wollenberg: Adolf.

ELECTION: 10 FEBRUARY 1948

An election of candidates for membership will take place on 10 February 1948. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday 7 February 1948.

The names following the applicant's address are those of his proposers.

AS FELLOWS (5)

Bell: James, D.S.O., M.B.E., T.D., B.Sc. [*A* 1932], Messrs. Frank Burnet and Boston, 180 Hope Street, Glasgow; 'Tister', Blanefield, Stirlingshire. A. N. Malcolm, William McCrea, J. S. Maitland.

Burnet: Frank Russell [*A* 1921], Messrs. Frank Burnet and Boston, 180 Hope Street, Glasgow; 'Enterkin', Kilmacolm, Renfrewshire. William McCrea, A. N. Malcolm, J. S. Maitland.

Fowler: Norman Harold [*A* 1936], Lloyds Bank Chambers, Vicar Lane, Leeds; 1 Alwoodley Lane, Leeds. W. H. King, N. R. Raxton, Victor Bain.

And the following Licentiates who have passed the qualifying Examination:

Boyman: Leslie Thomas, 82 Drake Road, Harrow, Middx. H. A. Metayers, T. E. Scott, A. J. McLean.

Nuttall: Orrell Hyde Herbert, Prudential Chambers, Banbury, Oxon. H. M. Luyken, D. G. McIntosh, Prof. L. B. Budden.

AS ASSOCIATES (41)

The name of a school, or schools, after a candidate's name indicates the passing of a recognized course.

Aimers: Jeffrey Jenner-Fust (Arch. Assoc. (London): Sch. of Arch.), 33 Ovington Street, S.W.3. R. F. Jordan, G. R. Dawbarn, A. R. F. Anderson.

Alden: Marguerite Yvonne (Miss) [Final], 6 Sandfield Road, Headington, Oxford. E. M. Rice, T. L. Dale, H. F. Hurcombe.

Arnold: Harold Godwin (Liverpool Sch. of Arch.: Univ. of Liverpool), Hillcroft, 2 Radway Road, Southampton. Prof. L. B. Budden, Donald Brooke, Herbert Thearle.

Beech: Geoffrey Clarence [Special Final], 3 Grange Road, Sutton, Surrey. E. C. Scherrer, J. K. Hicks, R. P. Baines.

Blakesley: Douglas Arthur [Final], 6 Kirby Road, Glenfield. William Keay, F. Chippindale, G. A. Cope.

Brown: James [Special Final], 4 Fairhaven Road, Bristol, 6. L. S. Stanley, G. A. Mitchell, J. N. Meredith.

Brown: Richard (Liverpool Sch. of Arch.: Univ. of Liverpool), 74 Sandforth Road, West Derby, Liverpool, 12. Prof. L. B. Budden, B. A. Miller, Donald Brooke.

Brown: Sam (Leeds Sch. of Arch.), 5, Pye Nest Drive, Halifax. W. C. Poppleton, and applying for nomination by the Council under Bye-law 3 (*d*).

Cunningham: Charles John, M.A.(Cantab) [Final] Wellclose, Nailsea, nr. Bristol G. G. Wornum, W. H. Watkins, J. Macgregor.

Evans: Cecil William Thomas [Special Final], 35 Grange Road, Prior's Wood, Taunton, Somerset. P. M. Andrews, Morris Joseph, Z. Sirotkin.

Graham: William Eadington, Dip. Arch. (Dist.) (Dunelm) (King's Coll. (Univ. of Durham) Newcastle-upon-Tyne: Sch. of Arch.), 42 Bourne Avenue, Fenham, Newcastle-upon-Tyne, 4. Prof. W. B. Edwards, R. N. MacKellar, C. A. Harding.

Haigh: Kenneth Bickerton, Dip. Arch. (Leeds) (Leeds Sch. of Arch.), 'Scholecarr', 70 New North Road, Heckmondwike, Yorks. Applying for nomination by the Council under Bye-law 3 (*d*).

Halkyard: Marcelle Patricia (Miss) (Nottingham Sch. of Arch.), 351 Valley Road, Sherwood, Nottingham. George Checkley, J. S. Bramwell, T. C. Howitt.

Haviland: Daphne Marion (Miss) (Arch. Assoc. (London): Sch. of Arch.), 8 Sloane Terrace Mansions, S.W.1. Frederick Gibberd, George Fairweather, R. F. Jordan.

Hirsh: Joseph Max (Northern Poly. (London): Dept. of Arch.), 1a, Ferntower Road, Newington Green, N.5 T. E. Scott, D. F. Martin-Smith, John Grey.

Jacobs: Marguerite (Miss), B.Arch. (Cape Town) (Passed a qualifying Exam. approved by the I.S.A.A.), c/o Messrs. Partington and Bolland, 22a, Sapling Road, Bolton, Lancs. C. P. Walgate, L. A. Elsworth, D. R. Harper.

James: William Anthony Victor (Welsh Sch. of Arch.: The Tech. Coll., Cardiff), 'Southlands', Hollybush Road, Cyncoed, Cardiff. Lewis John, L. R. Gower, C. F. Jones.

Jenkins: Robert Lewis, Dip.Arch. (Wales) (Welsh Sch. of Arch.: The Tech. Coll., Cardiff), 76 Redlands Road, Penarth, S. Wales. Lewis John, T. A. Lloyd, Harry Teather.

Junge: Helmut, B.A.(Arch.) (Bartlett Sch. of Arch.: Univ. of London), 33 Palace Gardens Terrace, W.8. Prof. H. O. Corfiato, Guy Morgan, L. S. Stanley.

Landau: Alexander William, A.M.T.P.I. [Special Final], 2b, The Straight, Cregagh, Belfast. Sir Frank Mears, R. S. Wilshere, R. H. Gibson.

Lawson: John Brodie [Special Final], 11 Lyndhurst Road, Chichester. C. G. Stillman, H. W. Burchett, F. R. Steele.

Lebensold: David Froim (The Poly., Regent Street, London: Sch. of Arch.), 44 St. Edmunds Drive, Stanmore, Middlesex. J. S. Walkden, Prof. Basil Ward, Joseph Addison.

Lee-Jones: June Swinford (Miss) (Arch. Assoc. (London): Sch. of Arch.), Ruff Cottage, Broomleaf Road, Farnham, Surrey. R. F. Jordan, G. R. Dawbarn, T. S. Tait.

Maclaren: Ian Harker (Liverpool Sch. of Arch.: Univ. of Liverpool), 8 Ducie Street, Liverpool, 8. Prof. L. B. Budden, Donald Brooke, B. A. Miller.

Miles: Susan Gambier (Miss) (Arch. Assoc. (London): Sch. of Arch.), 206 Howard House, Dolphin Square, S.W.1. George Fairweather, T. S. Tait, R. F. Jordan.

Miller: Mary Constance (Miss) (Arch. Assoc. (London): Sch. of Arch.), 26 Eaton Terrace, S.W.1. Frederick Gibberd, George Fairweather, R. F. Jordan.

Morrison: Samuel [Final], 'New Place', Morgan's Road, Hertford. C. H. Aslin, Maxwell Ayrton, T. C. Howitt.

Oates: Mary Elizabeth (Miss) (Nottingham Sch. of Arch.), Besthorpe, nr. Newark-on-Trent, Notts. George Checkley, J. Woollatt, R. E. M. Coombes.

Oberlander: Henry Peter (McGill Univ., Montreal: Sch. of Arch.), c/o Ministry of Town and Country Planning, 19 St. James's Square, S.W.1. Applying for nomination by the Council under Bye-law 3 (*d*).

Orton: Lloyd Emerson Albert (Passed a qualifying Exam. approved by the R.A.I.A.), 27 Warwick Mansions, Cromwell Crescent, S.W.5. Applying for nomination by the Council under Bye-law 3 (*d*).

Powell: Patrick Thomas [Special Final], 71 Church Lane, Stoke, Coventry. A. C. Bunch, H. T. Jackson, R. Hellberg.

Raven: Kenneth Shaw (King's Coll. (Univ. of Durham), Newcastle-upon-Tyne: Sch. of Arch), 81 Dryden Road North, Gateshead, Co. Durham. Prof. W. B. Edwards, W. Tweedy, Lt.-Col. A. K. Tasker.

Reader: Mary Kate Wade (Miss) (Arch. Assoc. (London): Sch. of Arch.), 30 Downside Road, Sutton, Surrey. R. F. Jordan, G. I. C. Highet, L. H. Bucknell.

Redpath: John Thomas [Final], 52 Stratford Road, W.8. L. S. Stanley, Sir Thomas Bennett, M. L. Winslade.

Rosenthal: Hans Werner [Special Final], 23 Woodland Avenue, Leicester. F. Chippindale, A. F. Bryan, G. A. Cope.

Smeds: John, B.Arch. (Durham) (King's Coll. (Univ. of Durham), Newcastle-upon-Tyne: Sch. of Arch.), 307 Sunderland Road, South Shields. Prof. W. B. Edwards, S. W. Milburn, G. T. Brown.

Shirley-Smith: Robin, B.Arch. (L'pool) (Liverpool Sch. of Arch.: Univ. of Liverpool), 'Fairholme', Grassendale Park, Liverpool, 19. Prof. L. B. Budden, Donald Brooke, Herbert Thearle.

Venvil: Brian Frank [Special Final], 178 Cherryhinton Road, Cambridge. Thos. E. Scott, H. D. Hendry, and applying for nomination by the Council under Bye-law 3 (*d*).

Waugh: Eric [Final], 32 Whinney Lane, Blackburn, S. G. Eldred, F. Chippindale, Norman Jones.

Williams: Howard Owen, Dip.Arch. (Wales), (Welsh Sch. of Arch.: The Tech. Coll., Cardiff), Flat No. 1, 29 Hall Road, Handsworth, Birmingham, 20. Lewis John, T. A. Lloyd, A. J. Margetson.

Wilson: Joyce Valerie (Miss) (Arch. Assoc. (London): Sch. of Arch.), 26 Eaton Terrace, S.W.1. A. T. Scott, Frederick Gibberd, George Fairweather.

AS LICENTIATES (14)

Allan: William Watt, 28 Queen's Gate, Inverness; 77 Telford Road, Inverness. W. J. Taylor, R. C. Ballantyne, J. A. Ross.

Bratby: Albert Edward, B.Sc., Architect's Dept., Messrs. Reckitt and Colman, Ltd., Norwich; 9 Highland Avenue, Norwich. J. G. Davies, A. G. Berry, E. W. B. Scott.

Camp: Frank Bernard, Housing Section, Borough of Holborn, Town Hall, High Holborn, W.C.; 74 Montpelier Road, Brighton. S. P. Dales, A. J. Butcher, P. Hickey.

Crook: George Lionel (Capt.), 7 Connaught Place, Hyde Park, W.; 65 Aragon Road, Morden, Surrey. M. R. Hofler, Charles Blythin, David Stokes.

Dyer: Sidney, Architect's Dept., Co-operative Wholesale Society, Ltd., 99 Leman Street, E.1; 17 Mount Nod Road, Streatham, S.W.16. H. M. Luyken, V. L. Nash, J. B. Surman.

Fenton: Willie James, c/o Messrs. Davidson and Garden, 12 Dee Street, Aberdeen; 'Correi', Kirkbrae, Cults, Aberdeenshire. J. G. Marr, G. A. Mitchell, A. B. Gardner.

Hurcomb: William Eric Attenburrow, Wallace Chambers, John Dickie Street, Kilmarnock; 131 Dundonald Road, Kilmarnock. Gabriel Steel, A. G. Henderson, A. H. Mottram.

Keat: Harry James, A.R.I.C.S., Architect's Dept., L.C.C. (Town Planning Division), County Hall, S.E.1; 118a St. Julian's Farm Road, West Norwood, S.E.27. R. A. Thomas, Edwin Williams, B. H. Toms.

Owen: Ronald Watkin, Docks Engineer's Office, Southern Railway, Southampton; 22 Cumberland Place, Southampton. W. J. Durnford, R. Wilson, G. W. Home.

Paterson: Hamish Noble, 17 Queens Gate, Inverness; Anarly, 9 Crown Drive, Inverness. W. J. Taylor, J. A. Ross, R. C. Ballantyne.

Rowe: Eric William, Architect's Dept., Middlesex County Council, 20 Vauxhall Bridge Road, S.W.1; 18 Park Street, High Wycombe, Bucks. C. D. Andrews, C. G. Stillman, G. L. D. Hall.

Rutter: Frank Mowbray, 7 St. Martin's Avenue, Epsom, Surrey. F. R. S. Yorke, E. M. Fry, M. H. Thomas.

Saunders: John Henry, 1 Carlton Crescent, Southampton; Tadburn, Romsey, Hants. Ernest Bird, B. H. Dale, A. E. Geens.

Wheatcroft: Maurice, Longedge Lane, Wingerworth, near Chesterfield. Stephen Welsh, D. B. Jenkinson, H. B. S. Gibbs.

ELECTION: 4 MAY 1948

An election of candidates for membership will take place on 4 May 1948. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday 24 April 1948.

The names following the applicant's address are those of his proposers.

AS FELLOW (1)

Todd: Sidney Herbert [*A* 1935], Provincial Buildings, Wale Street, Cape Town; Trelane, Pluto Road, Plumstead, Cape Town. W. B. T. Newham, C. F. S. Butt, G. E. Fitzgerald.

AS ASSOCIATES (9)

The name of a school, or schools, after a candidate's name indicates the passing of a recognized course.

Flatt: Derek Neeve, M.B.E. (Arch. Assoc. (London): Sch. of Arch.), P.O. Kitale, Kenya. G. Jellicoe, S. L. Blackburne, G. B. E. Norburn.

Hackner: Mannie, B.Arch. (Rand) (Passed a qualifying Exam. approved by the I.S.A.A.), c/o 47 St. Patrick's Road, Houghton, Johannesburg, South Africa. Applying for nomination by the Council under Bye-law 3 (*d*).

Hendrikz: Andre, B.Arch. (Rand) (Passed a qualifying Exam. approved by the I.S.A.A.), 14 Hampton Court, Joubert Park, Johannesburg, South Africa. Gordon Leith, A. S. Furner and applying for nomination by the Council under Bye-law 3 (*d*).

Jamison: Reginald Ivor (Passed a qualifying Exam. approved by the I.S.A.A.), c/o Messrs. Walgate and Elsworth, Garlicks Buildings, Cape Town, South Africa. C. P. Walgate, A. S. Furner, L. A. Elsworth.

Meyer: Max, Dip. Arch. (Cape Town) (Passed a qualifying Exam. approved by the I.S.A.A.), 'White Pillars', Cassels-Ulei Road, Bellville, South Africa. Prof. L. W. T. White, D. R. Harper, C. P. Walgate.

Price: Solly, B.Arch (Rand) (Passed a qualifying Exam. approved by the I.S.A.A.), 62 Langham Court, Pritchard Street, Johannesburg, South Africa. Applying for nomination by the Council under Bye-law 3 (*d*).

Ricketts: Neal Bruce (Passed a qualifying Exam. approved by the R.A.I.A.), 54 Forster Street, New Town, Hobart, Tasmania. Applying for nomination by the Council under Bye-law 3 (*d*).

Segal: Colman, B.Arch. (Rand) (Passed a qualifying Exam. approved by the I.S.A.A.), 138 Van Beck Street, Doornfontein, Johannesburg, South Africa.

Smith: Frank William, B.Arch. (N.Z.) (Univ. Coll., Auckland, N.Z.: Sch. of Arch.), Gladstone Flats, Gladstone Road, Suva, Fiji. Applying for nomination by the Council under Bye-law 3 (*d*).

Watson: Brian Watson (Passed a qualifying Exam. approved by the I.S.A.A.), 601 Union House, 80 Main Street, Johannesburg, South Africa. J. A. Hoogterp. J. W. H. Farrow, and applying for nomination by the Council under Bye-law 3 (*d*).

Members' Column

This column is reserved for notices of changes of address, partnership and partnerships vacant, or wanted, practices for sale or wanted, office accommodation, and personal notices other than for posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr. George W. Dunton [*A*] has been appointed as Architect and Design Consultant to Messrs. Gaskell and Chambers Limited, of Birmingham and London.

Mr. William M. Higgins [*A*] has been appointed Assistant Architect in the Education Department, County Borough of Middlesbrough, and his new address is Education Offices, Woodlands Road, Middlesbrough.

Mr. E. J. Kipps [*L*] has been appointed Architect and Housing Manager to the Market Harborough Rural District Council. Previous to this appointment, Mr. Kipps was on the staff of the Borough Surveyor, Leyton Borough Council, E.10. His new address is Council Offices, 42 High Street, Market Harborough, where he will be pleased to receive trade catalogues, etc.

Mr. John T. Murray [*A*] has been appointed Chief Architect to the Whitehead Cotton Combine, and would be pleased to receive trade catalogues, etc. at the Head Office, Lower Mill, Rawtenstall, Rossendale, Lancs.

Mr. Stanley Ralph [*A*] has been appointed as an Architect on the staff of the Architect-in-Chief, Public Service Commissioner, Government of South Australia, Adelaide, where he will be pleased to receive trade catalogues, etc.

Mr. Charles Scott [*A*] has been appointed Chief Assistant Architect (Health) in the office of the City Architect of Leeds.

Mr. Mark Hartland Thomas, M.A. [*F*], was on 1 December 1947 appointed Chief Industrial Officer at the Council of Industrial Design, Tilbury House, Petty France, Westminster, S.W.1. (Whitehall 6322.) His private address is 46 Sheffield Terrace, Kensington, W.8 (Park 7678).

PRACTICES AND PARTNERSHIPS

Mr. Kenneth Anne [*L*] has reopened his practice at 1 Lincoln's Inn Fields, and will be pleased to receive trade catalogues, etc.

An Australian firm of architects have informed the R.I.B.A. Appointments Department of vacancies in their Melbourne office for a Town Planning Assistant and an Architectural Assistant, at annual salary scale of A£550-A£625 and A£625-A£728 respectively. For further particulars, please apply to the Secretary, R.I.B.A.

Since the retirement of Mr. A. C. Goulder [*F*] in 1945 and the death of Mr. Gerald Unsworth, M.B.E., M.C. [*F*] in 1946, the former partnership, Unsworth, Goulder and Bostock, has been carried on by **Mr. Robert Bostock,** M.A. [*L*] under the name of **Unsworth and Bostock** at 8 Cromwell Place, S.W.7, and Petersfield. **Mr. Bostock** has now taken into partnership **Mr. L. T. Wilkins,** B.A. [*A*]. The name of the firm will remain unchanged.

Mr. J. Stuart Dilks, B.A. [*A*] has now incorporated the practice of the late **Mr. E. E. Kemeys-Jenkin** [*F*] with his own. He will occupy offices at 22 Southernhay East, Exeter (Exeter 4439), and will continue to attend at 58 High Street, Honiton (Honiton 146), on Tuesdays and Saturdays. Mr. E. E. Kemeys-Jenkin's staff are remaining with Mr. Dilks. Mr. Dilks's private address is Orchard Cottage, Exton, Exeter (Topsham 8451), but all correspondence should be addressed to 22 Southernhay East.

Mr. T. D. Gedrych [*A*], who is leaving for East Africa shortly to take up the appointment of Architect with the United Africa Co. (Managing Agency) Limited, will be pleased to receive trade catalogues, etc., at c/o United Africa Co. (M.A.) Ltd., P.O. Kingwa, Tanganyika, East Africa.

The partnership between **Erno Goldfinger** and **Colin Penn** [*A*] has been dissolved by mutual consent. **Mr. Penn** will practise from 62 Parliament Hill, N.W.3 (Hampstead 3416), and **Mr. Goldfinger** will continue to practise from 69 Piccadilly, W.1 (Regent 5210).

Dr. Charles Holden, Mr. Lionel Pearson and **Mr. P. W. Adams** [*F*/*F*] have taken into partnership **Mr. Laurence Angus,** M.A. [*A*], who has been an associate partner since 1925. **Mr. W. A. Guttridge** [*A*] and **Mr. K. H. Urquhart,** who have been with the firm since 1935 and 1931 respectively, have now also become partners on their return from the Services. The firm will continue to practise under the title of **Adams, Holden and Pearson.**

Mr. Harry Holland [*F*], formerly Senior Assistant Architect, London, Midland and Scottish Railway, has retired from the services of the Railway Company and is commencing private practice at 'Caswell', Bargrove Avenue, Boxmoor, Herts (Boxmoor 970), where he will be pleased to receive trade catalogues, etc.

Mr. Cecil Howitt, D.S.O. [*F*], has taken into partnership **Mr. Philip Gerrard** [*A*] and **Mr. Frederick E. Woolley** [*A*], both of whom have been associated with him for 17 years. They will practise as **Cecil Howitt and Partners** at St. Andrew's House, Mansfield Road, Nottingham (Nottingham 65052-3).

Mr. Sergei Kadleigh [*A*] has relinquished his partnership with the firm of **Ryan and Partners,** and is now conducting his own practice from 9 Mansfield Street, London, W.1 (Langham 1081). He will be pleased to receive trade catalogues, etc.

Mr. F. S. Palling [*L*] is now a partner in the firm of **Kenneth Lindy, Joseph Hill and Partners,** who will carry on the practice of the late Joseph Hill at 24 St. Mary Axe, London, E.C.3 (Avenue 5629 and 4430).

Mr. H. C. Quérée [*L*] has taken into partnership **Mr. P. B. Swain,** M.A. [*A*]. They will practise as **Quérée and Swain** at 28 Halkett Place, Jersey.

Mr. F. C. Saxon [*F*], 2 Stanley Street, Chester, has taken **Mr. R. V. Smith** [*A*] into partnership. The practice will now be conducted under the title **Saxon, Smith and Partners.**

Mr. Frederick Sutcliffe [*F*] (late **Elcock and Sutcliffe**) is resuming private practice at 60 Haymarket, London, S.W.1, but until this accommodation is available he is practising from 6 Rydens Road, Walton-on-Thames, Surrey.

The firms of **W. N. Woodroffe and Son** and **Buchanan and Coulter,** both of 5 Bedford Row, W.C.1, are merged from 1 January 1948, and the name of **Woodroffe, Buchanan and Coulter** will be adopted. The address is 5 Bedford Row, W.C.1 (Chancery 7881-2). The partners will be **N. F. Woodroffe,** O.B.E. [*F*], **J. W. Buchanan** [*F*] and **H. G. Coulter,** M.B.E., M.C. [*F*].

CHANGES OF ADDRESS

Mr. Richard Frankland [*L*] has removed to 121 Henthorne Road, Clitheroe, Lancs.

Mr. L. J. Grigg [*A*] announces change of address from 12 Sandy Close, Hertford, to County Architect's Department, County Hall, Ipswich.

Walter Hanstock and Son (Mr. A. Gilbert Hanstock [*A*]) have moved from Branch Road, Batley, Yorkshire, to 10 and 11 Central Chambers, Westborough, Scarborough, and all communications should be sent to the new address.

Mr. E. Coleman Hicks [*A*] and his assistant, **Mr. McConnell** have opted for the Government of Pakistan, and Mr. Hicks has relinquished his previous appointment as Senior Architect (Aviation) Government of India, New Delhi, to take up the position of Consulting Architect and Planning Officer to the Government of East Bengal. Both Mr. Hicks's and Mr. McConnell's address is Consulting Architect's Office, Communications Works and Waterways Department, Government of East Bengal, Eden College, Dacca, East Bengal.

Mr. Morton A. Mackenzie [*L*] has removed from Mawson's Buildings, Mosley Street, Newcastle-upon-Tyne, to 1 Eldon Square, Newcastle-upon-Tyne, 1 (Newcastle 22230).

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Associate wishes to purchase practice in South or South-West England. Purchase price between £4,000 and £5,000. Reply with all details in confidence to Box 114, c/o Secretary, R.I.B.A.

Member with London practice would be pleased to give part-time assistance to other architects. Reply Box 104, c/o Secretary, R.I.B.A.

Owing to ill-health and overwork the principal of a prosperous firm in the South of England requires an experienced architect of not less than ten years standing with a view to immediate partnership and ultimate succession. Reply Box 112, c/o Secretary, R.I.B.A.

WANTED AND FOR SALE

Wanted. Set of volumes of 'Planned Information'. Reply Box 115, c/o Secretary, R.I.B.A.

For Sale. 'T' squares, mahogany, 42 in. and 20 in. oak, 42 in. and 26 in.; boxwood, 24 in., all in new condition. Reply Box 116, c/o Secretary, R.I.B.A.

For Sale. 'Ancient London Churches', by Francis Bumpres (15*s.*); 'Story of Westminster Abbey', by V. Brooke-Hunt (7*s.* 6*d.*); 'English Castles', by E. B. D'Auvergne (15*s.*); 'Celtic Myth and Legend', by Charles Squire (5*s.*); beam compass set, electrum, micro adjustment, in case, 2 guineas. Reply Box 118, c/o Secretary, R.I.B.A.

For Sale. Good pre-war Thornton's light, 12 in. dumpy level in mahogany case, with tripod, 66 ft. Chestermans and 33 ft. steel tapes, practically new. No. 8 9 ft. ranging poles, double elephant drawing-board with ebony edge. two good mahogany edge 'T' squares, 3 ft. 6 in. long. Reply Box 119, c/o Secretary, R.I.B.A.

For Sale. 14″ Y level with horizontal dial, tripod and box. Level in good working order, but requires a small repair. Apply Dudding, Thornley & Summers, Architects, 30 Regent Street, Nottingham.

ACCOMMODATION

Office to let in High Holborn, W.C.1. 16 ft. 0 in. by 11 ft. 6 in., plus bay window with use of waiting room, light, telephone, £200 p.a. with if required, some furniture and part-time secretarial assistance. Terms to be arranged; also available a seat in the drawing office with secretarial assistance, telephone, light, heat, filing cabinet and plan chest, £2 a week. Reply Box 113, c/o Secretary, R.I.B.A.

Member with excellent offices in London (S.W.) would sub-let private room with common use of waiting room and telephone. Some clerical assistance might be arranged. Would suit young or elderly architect. Reply Box 117, c/o Secretary, R.I.B.A.

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